

QPEC

Quality
Public Education
Coalition



TEACHING AND LEARNING UNDER COVID

*A survey of teachers
January 2023*



Acknowledgements

This research was carried out by a team from the Quality Public Education Coalition, a not-for-profit organisation working to strengthen and enhance public education.

The team of Liz Gordon (Principal Investigator), Beverley Roser, John Minto, Wei Loo, Barry Lee, Anna Lee, Linda Jordan, and David Cooke designed, administered, analysed and wrote the report.

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Research leader.

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Executive summary

The Quality Public Education Coalition decided to investigate teaching and learning under Covid. We were interested in a range of issues, including the use of online devices and of distance learning techniques. We wanted to find out from teachers what the past three years have been like, and what they thought about student learning.

Our survey received ethical approval (NSEC 2202_08). Both the PPTA and NZEI commented on it and advertised it through their newsletters. Over 700 teachers opened the survey leading to 555 usable responses.

The responses came from every sector, around the whole country, from all age groups and ethnicities. The participants were well spread across school deciles, 75% were female and had from 0 to more than 21 years of teaching.

The number of responses were too small and random to claim a nationally representative sample. Nevertheless, a great range of responses were received.

Devices and online tools

Only a third of participants used online or distance approaches to teaching before the first lockdown. Most of that work was online in the classroom. Comparing early 2020 to August 2022, there was a huge shift on the amount of time spent on e-devices in the classroom, with most now spending 2-5 hours (compared with less than one hour) on devices.

Participants were quite equally divided on the value of e-learning devices in the classroom. Around half were, however, concerned that devices are too much of a distraction from learning. Most believe that students would learn better with less time on devices.

However, the picture changes when student motivation is taken into account. More than three quarters of participants agreed that motivated students work well on devices, while 30 percent agree that less motivated students learn well on them. Distraction by engagement with social media is seen by most as a constant problem in the classroom. Nearly 90 percent of participants felt that it is better for schools to provide devices which are programmed for the work students need to complete, rather than their own devices which can be full of social media, games and other distractions.

Less than 10 percent of participants agree that it would be better for students to spend more time (than currently) on devices. On the other hand, around 40 percent think that the good outweighs the bad for students learning on devices in the classroom. And only 12 percent think all devices should be banned at school, while nearly half strongly disagree.

Remote learning

Nearly three quarters of participants had no experience at all with remote learning before schools went into lockdown in 2020. Most of those with experience used Zoom, online learning platforms, email and delivery of hardpacks.

Only 29 participants noted that continuity of learning was maintained for all learners, although it was more likely to be maintained for well-resourced learners. There were a number of barriers to continuity, and these fell particularly on deprived learners.

Only a third of participants felt that students, and slightly fewer felt that teachers, were well-supported through online learning. There was a wide range of views about whether hardpacks were useful, based on who got them and when, whether the material was of the right kind and at the correct level. Two thirds of participants thought they were not an effective replacement for classroom learning, for that reason.

Views were more mixed about whether assistance offered to students learning with computers was excellent. Levels of support were dependent on a number of factors: location, school type, access to devices (including shared devices or no devices, and shared internet) and effectiveness of systems.

Overall, only a quarter of participants agreed that students used online learning services effectively. They spoke of a “fractured focus” and a lack of time and support in their work. There were issues of engagement in online teaching and problems with weak or over-used internet in many households. Disengagement followed.

Support and resources for teachers

The shift to online learning during lockdowns affected teachers in many ways. For some it was a relatively unproblematic process which built on existing online tools operating in the classroom. Some teachers had relevant IT skills that allowed them to support students online. There were big differences in subject delivery too. Mathematics was widely noted as a difficult subject to teach at a distance, with students difficult to engage. Other ‘practical’ topics faced many barriers too, even though teachers often spent ages delivering materials to students. Students with special learning needs suffered from a lack of face-to-face support.

Most teachers (63%) felt their schools were fairly well prepared to support teachers under lockdown conditions. The lack of national ‘best practice’ guidelines or leadership meant that schools offered varying advice and support to teachers. Some were required to carry on as normal, teaching the full curriculum in real time, others realised that this was not sustainable and focused instead on student support.

Most staff were expected to be available online throughout the normal school day, which some found very difficult due to screen-time issues and responsibilities emerging from working at home. Most teachers noted also that support time tended to expand to meet student needs, and needs often occurred out of school hours. Some felt very pressured while others enjoyed a more flexible environment. Most (73%) felt that schools were well-resourced to support teachers to meet lockdown conditions.

Half of teachers received specific professional development in online delivery and half did not. Most found it quite or very helpful. Participants noted that the first lockdown was accompanied by significant goodwill and realistic expectations. But over time, goodwill was reduced and expectations varied. Most teachers agreed that the Ministry provided much support, but resources for equitable learning, children with diverse needs and bilingual or immersion programmes were not well supported.

Student engagement and academic progress

A central finding of this study is that participants report low levels of student engagement in learning now, compared to before the first Covid lockdown. This was a very strong finding, with more than eight out of ten participants noting students were less, or much less, engaged, and less than ten percent noting they were more engaged.

Only a quarter of participants thought that students had completed between 75 and 100 percent of the curriculum during 2021, and participants noted that outcomes did not improve much in 2022. Learning gaps emerged, between students with strong resources and support, and others. Lack of motivation and other factors held back learning. Some reported 2022 was the hardest year of the pandemic.

During 2022, student engagement has come to the fore in the guise of non-attendance at school. While non-attendance is framed as an individual problem of “truancy”, it has been much more widespread than usual. Estimates of regular attendance at school during 2022 appeared to indicate that less than 40 percent of students attended regularly. While there were many reasons for non-attendance, participants in this study are of the view that disengagement is a massive problem that has not been effectively addressed and is likely to continue into 2023.

Face to face or online learning

Participants do not know whether online learning models will become much more common in the future. They are almost equally divided between expecting a re-focus on face to face classroom learning and a larger focus on online learning.

However., it became obvious from many qualitative comments that participants believe it is “vitally important” to move back to strong classroom learning models. These provide guidance and stability for students, allow far better oversight of student learning, provide a social context for learning and help students apply themselves to learning on a consistent basis. Learning in the classroom was considered to be not only more effective but also more efficient, with instant feedback and learning correction.

A number of participants felt that the remote learning model had affected the emotional and mental health of students. A number noted that students returning to school had more emotional and behavioural problems.

Finally, there are concerns that there will be attempts to embed a ‘side-by-side’ model of online and face to face methods, which may include dual mode learning. There are major concerns that such a model will bring in an unsustainable and less effective approach to learning which will not improve student learning.

Participants are not opposed to online learning approaches nor, as noted above, the use of devices. What the large majority are calling for is strong classroom-led models in which online, and even potentially aspects of remote learning, take their place to enhance face to face learning.

However, prior to this, questions of student attendance, engagement, participation and achievement, which participants note to be at historically low levels, needs to be resolved. Teacher effectiveness is dependent on students being at school and ready to learn.

Introduction

On 23 March 2020, the Government announced that schools would be closed from the next day, for a minimum of four weeks, due to the emerging Covid pandemic. This announcement was followed by a whole-of-country lockdown which commenced at midnight on 25 March.

The question of how to continue the education of a million or so schoolchildren was a huge one. The school system in New Zealand was almost universally classroom-based, with little systematic online work and low reliance on digital platforms. Teacher education programmes, too, have remained heavily based on supporting face-to-face interactions.

While digital revolutions were occurring in a range of industries, forcing changes in work practice and roles, the classroom-based model has remained essentially unchanged (with a number of modern flourishes) since Victorian times.

From one week to the next, then, teachers were expected to adapt to and adopt effective models of distance learning. They received assistance from the Ministry of Education especially in terms of resources such as classroom packs, devices and access to online learning systems. The schools they worked in offered varied help, from strong models of academic and pastoral support to very little guidance at all.

Schools were affected by all the stages of COVID, and still are today. These stages included lockdowns, mask-wearing, large COVID infections in schools, other forms of illness and then difficulties in engaging students for a variety of reasons. It was estimated that daily average school attendance at the end of 2022 was at around 58%, an historic low.

Many teachers reported that they are, essentially, teaching in both online and face-to-face mode, seemingly permanently.

The Quality Public Education Coalition developed this survey for teachers in order to gain a better understanding of their experiences teaching under COVID. In developing the survey and consulting with others, the spotlight inevitably fell on the use of online resources (and devices) in the school system in the past, present and future.

As a result, the survey speaks to key policy issues that will shape the future of schooling in Aotearoa.

Methodology

The methodology focused on collecting data through an online survey which was available on the QPEC website in October and November 2022. It was publicised via both NZEI and PPTA networks. As this was a survey developed by a community organisation and run by volunteers, quite a lot more could have been done to publicise the survey, but we ran out of time and resources.

Also, we were aware that teachers were facing many barriers of their own towards the end of 2022 (many of which they describe in the survey). We were hoping for a strong response from teachers, but only 717 participants commenced the survey and 555 completed it. From the high levels of engagement in responding, we are confident that, had we managed a better profile for the survey, many more teachers would have responded. Anecdotal reports indicated that many teachers were overwhelmed with work and some had taken part in other surveys.

The results therefore provide a snapshot from a moderate sample of teachers about their experiences teaching under Covid. A larger survey is certainly warranted, given the complexity of results. There are also some reliable findings which should guide future policy and practice.

The survey mainly provided ‘tick box’ options and Likert-type scales to elicit teachers’ experiences of working under COVID. Several questions had qualitative add-ons.

The final question gave participants the opportunity to “have your say” about “online and distance teaching and learning under COVID”. Many gave full and illuminating responses. Most of the participants were schoolteachers, as shown in Table 1.

Table 1. Proportion of survey respondents by position (n=717)

Answer	Percent
Teacher	76.84
Support staff	10.38
Special needs teacher	2.41
Teaching principal	1.50
Other, please specify	8.87

Other responses were mainly from teachers who also held other positions and seniority, including heads of departments, Principals, Deans or a range of other school positions (e.g. counsellor). They came from secondary schools (56%), primary schools (31%) and other (intermediate, area school, other secondary and primary configurations, ECE).

Eighty percent taught at a state school, 14% at Kura Kaupapa Māori and 6% other. All school deciles were well-represented, with under- and over-representation at the lower and higher levels respectively.

Table 2. Proportion of responses by stated school decile (n=656)

Decile	Proportion	Decile	Proportion
1	7.79%	6	9.12%
2	5.97%	7	13.10%
3	9.45%	8	11.11%
4	9.12%	9	13.60%
5	9.29%	10	11.44%

A small number of participants (11) reported currently working in a kura (te reo Māori) environment.

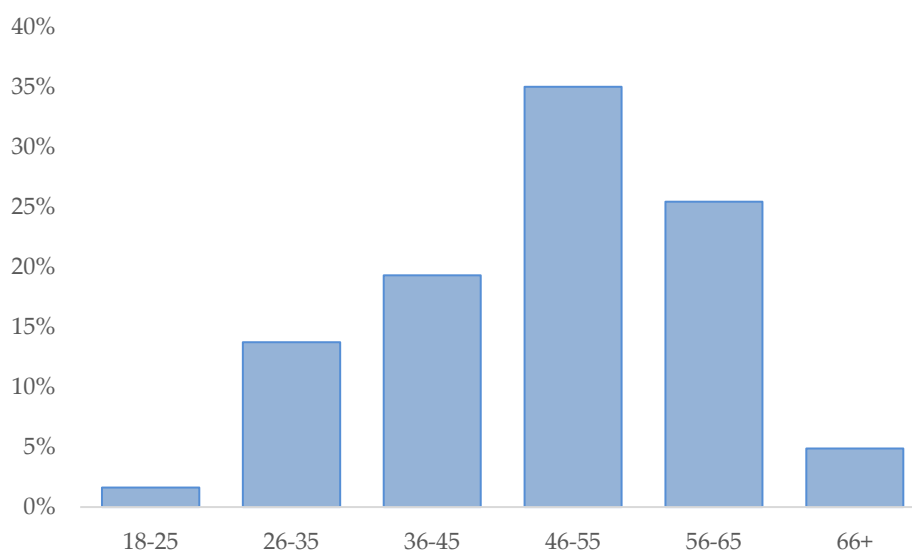
Teachers ranged from beginners to highly experienced, as shown in Table 3.

Table 3. Reported years of teaching (n=656).

Answer	Proportion
0-5 years	14.48%
6-10 years	15.40%
11-15 years	14.63%
16-20 years	17.38%
21+ years	38.11%

Participants were 75 percent female, nineteen percent male and the rest were non-binary or other. They were 70% pakeha, ten percent Māori, five percent Pasifika and the rest from over 30 countries, including India, China, Australia, the Middle East and Africa. The age range of participants is outlined in Figure 1.

Figure 1. Age of participants in survey (n=554).



The data was analysed using the Qualtrics self-analysis reporting, Excel spreadsheets to graph and compare data, and NVivo to classify and sort the qualitative data. Various members of the

research team wrote up parts of the study into this report and Liz Gordon took responsibility for the overall form and content of the report.

Relevant literature

A literature review was not carried out for this study, but QPEC had already been examining online learning models in education overall. A brief review and some references are provided here. Please note this is indicative rather than exhaustive.

For the last two decades, there has been a growing push through the NZ education system to promote online learning. In the mid-2010s, for instance, online delivery was appealing to the National Government with its policy of COOL – Communities of Online Learning – for different levels of the school system (Jones, 2016; Parata, 2016). Online has obvious though controversial advantages for tertiary education managements (Cooke, 2018).

Worldwide, there has been study of the use of computers in education. An example is Karlson's (2022) comprehensive analysis of TIMSS international data, based on 900,000 fourth graders from years 2011 and 2015. Karlson found "mostly no or weak evidence that computers in education are increasing achievement" (p. 73). Furthermore, that daily use of computers in school might affect test scores negatively and that school use is more negatively associated with test scores than home use (p. 73). However, with moderate use of computers, performance is positively related to home use, though it's only a small effect (p. 73).

Covid-19 has forced questions of readiness for emergency, along with major changes and adjustments in education across the sector. An early internationally-based study asked whether NZ teachers and students were ready for the situation (OECD, 2020). Since then there have been various inquiries at different levels. One area is ECE (e.g., Mitchell, Hodgen, Meagher-Lundberg, & Wells, 2020). A second is school learning (e.g., Education Review Office, 2020; the digital divide in education (digital.govt.nz, 2020); ERO, 2021, *Learning in a Covid-19 world*). A third is tertiary education (Sedgwick, 2021).

Internationally an OECD (2022) study looks at *How learning continued during the COVID-19 pandemic*.

Issues arising for the current study included the following:

- inequities and inequality in education and society
- the demands of
 - remote teaching, including complexities and workload
 - balancing remote teaching with in-school presence
 - balancing hard-pack and soft-pack resources
- demands imposed on Māori, Pasifika and second-language speakers of English
- the advantages and opportunities of remote teaching
- teachers' and support staff perceptions of
 - residual (pre-pandemic) issues in education (e.g., workload; digital divide; unequal resources)

- student access to online learning and resources
- student engagement in remote learning
- the (dis)connect between claims of online success and reality in teaching and learning
- parents' roles in online delivery

Devices and online tools in the classroom

The first set of questions requested information and views on the use of online materials and tools in the classroom prior to the first Covid lockdown. The aim of this question was to set down a benchmark for understanding the almost overnight switch to distance and online methodology that occurred in March 2020 in New Zealand schools.

Table 4 Whether participants used online or distance methodologies prior to first Covid lockdown (n=650)

Answer	Percent	Count
Yes	36.31%	236
No	63.69%	414
Total	100%	650

Just over a third reported using online or distance methods prior to the first lockdown. Those that responded 'yes' were asked to select the main method they used. Most selected in-class online methods using devices.

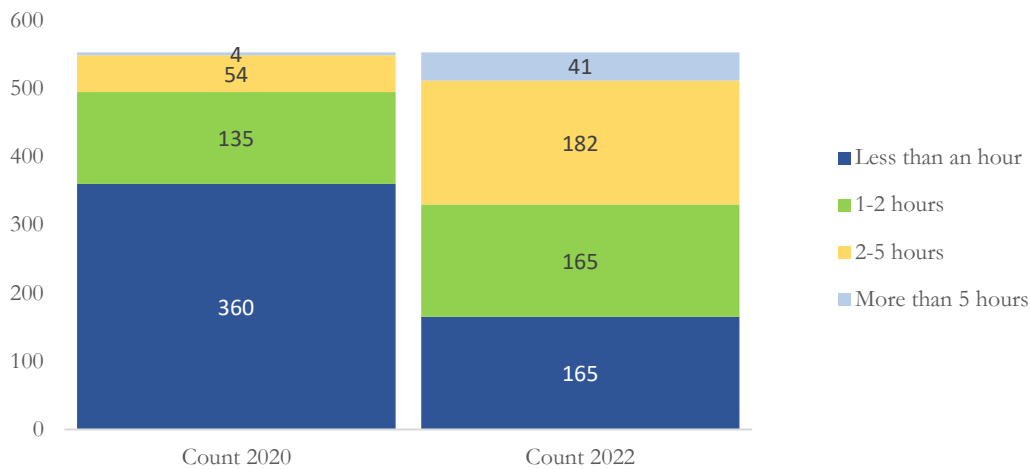
Table 5. Online or distance method used prior to first Covid lockdown (n=204)

Answer	%	Count
Online in the classroom using devices	71.57%	146
Online with students logging in from home	17.16%	35
Offline using the delivery of packages of learning	2.45%	5
Other, please specify	8.82%	18
Total	100%	204

A number of participants stated that they worked for Te Kura (remote school) or taught courses for the NZ online learning community. Some used a combination of methods. Others reported their own initiatives towards online learning, such as YouTube channels, use of platforms such as TEAMS for all course notes, working across schools sharing resources, recording lessons for online use and specific remedial online options for dyslexic children or for individual subjects. The responses seem to indicate that, as well as engaging with devices in the classroom, there was a lively (if small) online community operating in classrooms around the motu.

To try and understand the impact of Covid, participants were asked how much time, on average, did a typical student spend on an e-learning device in the classroom each day in early 2020 (prior to the first lockdown) and then again in August 2022. This is important information around changed practices, but there are a number of caveats to interpreting the findings. The main difficulty is that the classroom in mid-late 2022 was a very different place to early 2020, with evident learnings gaps, low attendance (little more than half of students in class on a given day) and continued effects of illness. These differences are discussed below in a range of qualitative comments provided by participants about experiences under Covid and beyond.

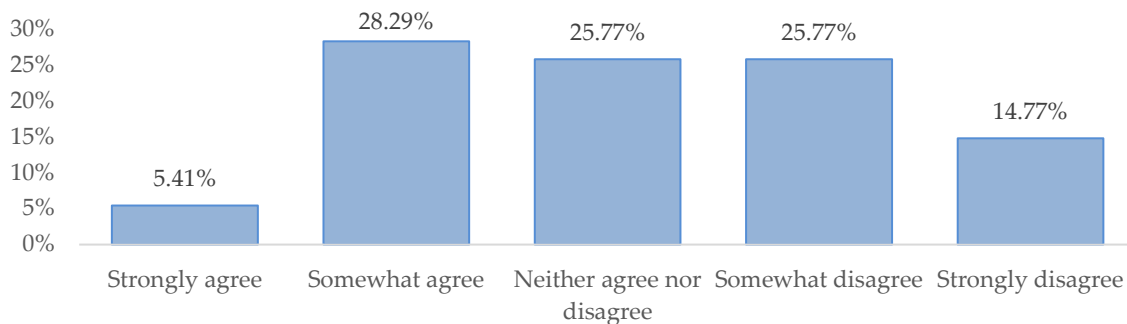
Figure 2. Time on “e learning devices” in the classroom, comparing early 2020 and August 2022 (n=553).



With the important caveats above noted, there has been a very large reported shift towards the use of e learning devices in the classroom, presumably driven by the necessity of device use during school lockdowns. The drivers of this shift, and its implications for student learning, are discussed in more detail throughout this report.

A large question, with fourteen different parts, sought to establish participant views on learning devices in classrooms. The responses should be considered within the context of the findings of Figure 2, which shows both huge shifts, but also large differences, between classrooms in the use of devices for learning. For example, those who responded ‘less than an hour’ on devices in both 2020 and 2022 are less likely to be positive about devices in the classroom.

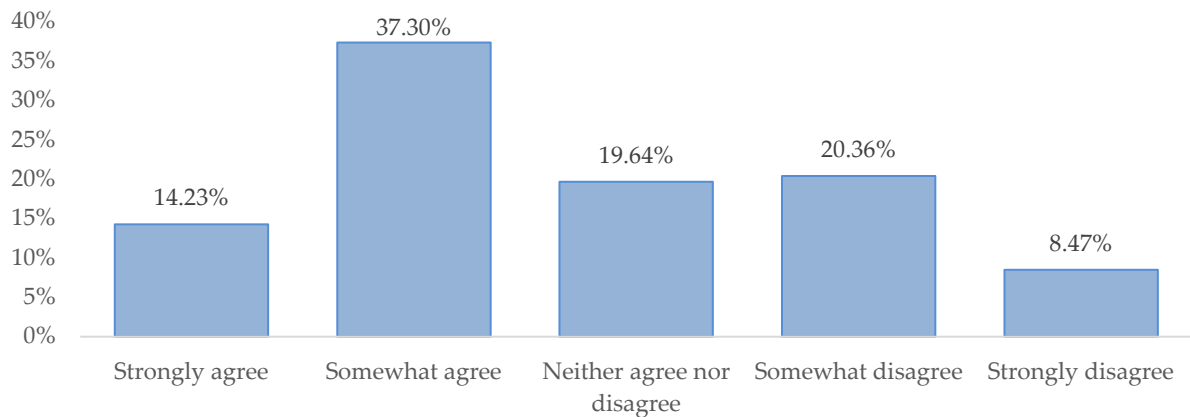
Figure 3. Students are better engaged in their learning on devices in the classroom (n=555).



Given the results of figure two, it is not surprising that participants are somewhat evenly divided on the value of devices for engaging in learning. Around 34 percent note students are better engaged in their learning on devices in the classroom, but 41 percent disagree, with a quarter neutral. The wide range of responses suggests there are multiple factors at play in this question, which is not surprising, given its broad nature.

This question was designed to elicit a baseline response from participants about learning on devices, and the result indicates there are no clear trends to be gleaned – that views around student engagement on devices in the classroom are distributed across the whole spectrum.

Figure 4. Devices are too much of a distraction to learning (n=555).



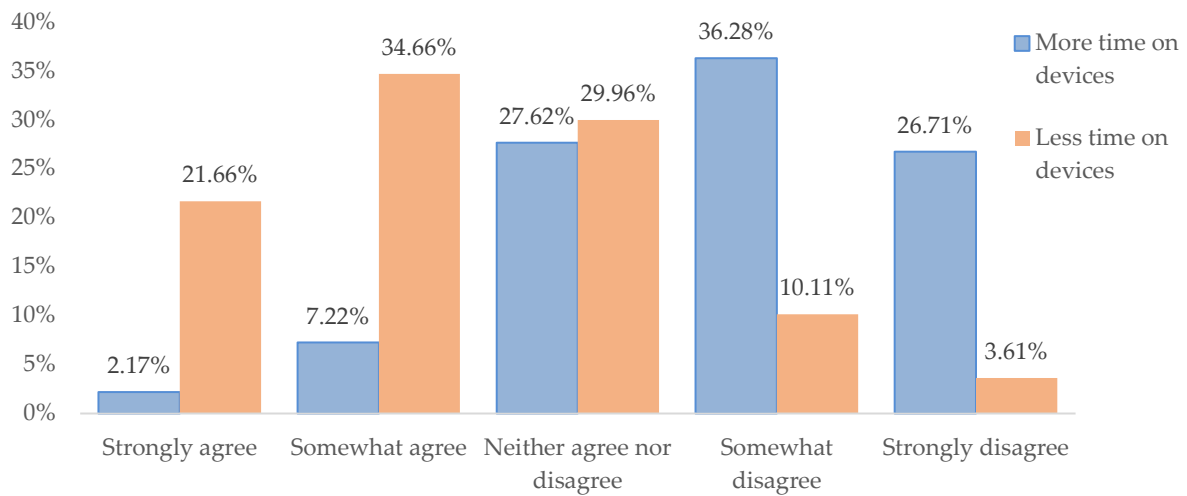
The results of this question reflect wider debates in the education sector on the use of devices in the classroom. More than half (52 percent) of participants agree that “devices are too much of a distraction to learning”. This reflects the view that while highly motivated learners can engage effectively with devices in the classroom, others do not. Devices are also seen as the cause of falling motivation in some research and among participants in this study.

This is an important result. Access to devices has been a major focus of educational policy in recent years with the assumption that learning devices in the classroom would improve educational opportunities, especially for disadvantaged learners. Devices in policy are seen as a way to reduce disparities in student achievement. Most responses indicate that devices in the classroom are too much of a distraction, endangering learning for some. A key issue explored later, which may have informed this result, is the effect of Covid, distance learning and device use on student orientation to learning and motivation. For example:

Online learning worked reasonably well for motivated students who managed their time well, but not for less motivated, some of whom could not get out of bed in time for lessons in the first part of the mornings. This year, motivation is lacking amongst some of my Year 13 students: the effect of three disrupted years. While my school had provided PD about how to use Microsoft TEAMS several years ago, it was poorly done and of no use. My department taught ourselves how to use TEAMS from a couple of really good You Tube videos.

The third area on which participant views were sought relates to the amount of time on online devices. This question did not differentiate between online learning in the classroom and distance learning, and follow up work should probably make this distinction, given the general view of participants that classroom learning is crucial in whatever mode (discussed below).

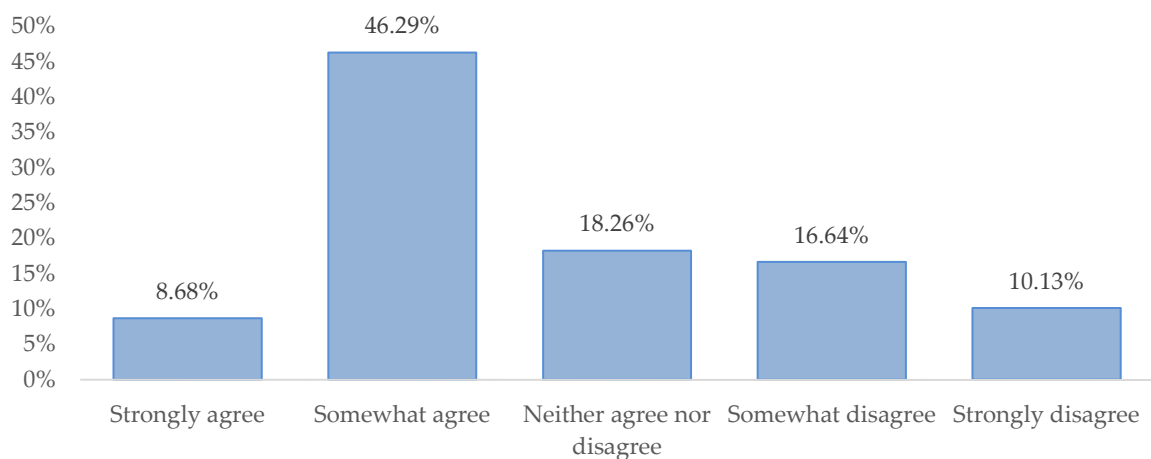
Figure 5. Students would learn better with more time or less time on devices (n=554)



Less than 10 percent of teachers agree that students would learn better with more time on devices, while 63 percent of teachers disagree. There is a very strong view among participants opposing more time on devices generally. On the other hand, 56 percent of teachers agree students would learn better with less time on devices. It is clear from this pattern of responses that most teachers are concerned about the negative impact of devices on student learning.

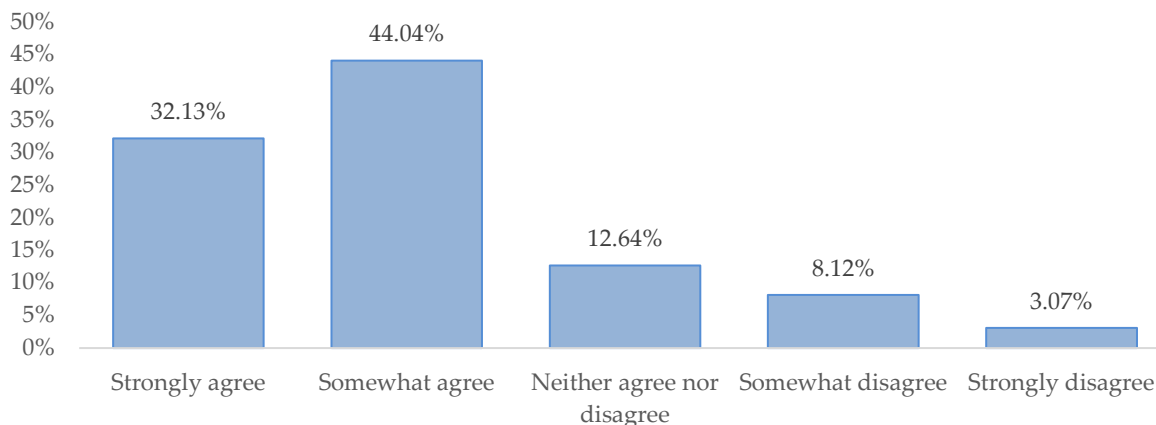
The next question asked for teachers' views on whether the use of devices in the classroom relieves some pressures on teachers. Despite concerns about student learning on devices, and resistance to more time on devices in the classroom, there was strong agreement among participants that devices release some pressures on teachers.

Figure 6. Devices release some of the classroom pressures on teachers (n=553)



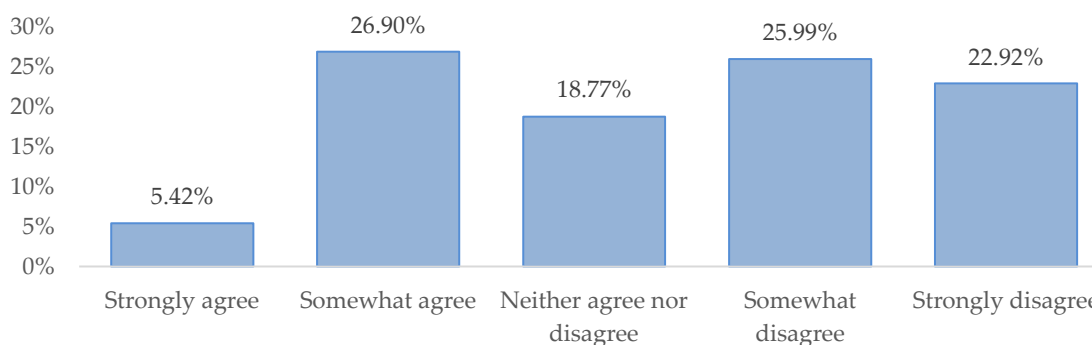
On this broad topic, 55 percent of the teachers surveyed reported that the use of devices in the classroom help ease pressure on teachers. In qualitative comments below, teachers note that online learning can provide time and opportunities to give additional support in the classroom for vulnerable students. However, Figure 5 above also makes it plain that time on devices affects learning achievement. The survey delved a little further into the relationship between devices and student learning in the next question, see Figures 7 and 8 below.

Figure 7. Students already motivated learn well on devices (n=554)



This question provides important information showing that over three quarters of participants (76 percent) agree that students already motivated learn well on devices. This strong result indicates that already well-motivated students will use devices to enhance their learning. Motivation is important both in terms of self-management and also to avoid the distractions that online learning provides.

Figure 8. Less motivated students learn well on devices (n=554)

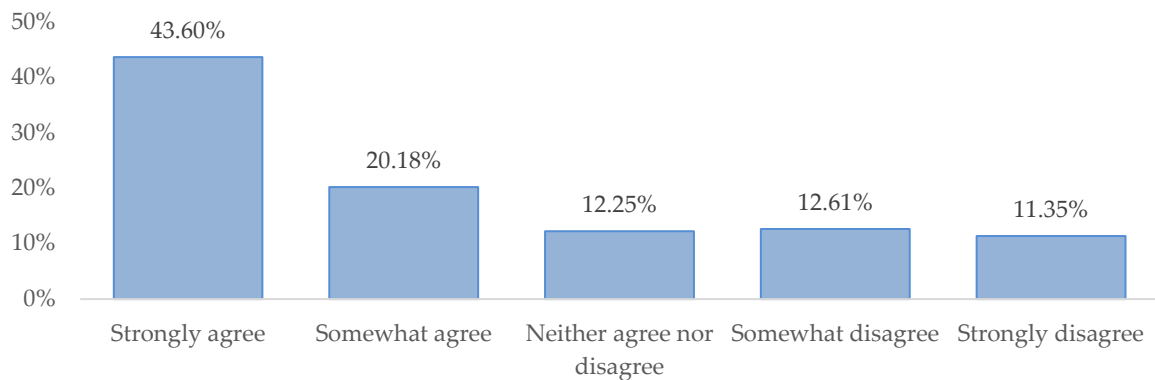


There is far less agreement on whether less-motivated students learn well on devices. Just under half of teachers disagree with this statement. Few strongly agree. A quarter of teachers agree that less motivated students learn well, and nearly a fifth neither agree nor disagree.

This issue, the relationship between student motivation, achievement and online learning is considered in a separate section below reporting qualitative comments. The over-riding view is that self-motivation has been difficult for many students over the past couple of years, and that this has impacted on the learning of some more than others:

Students who were not self-driven suffered the most. The lockdowns have enabled helplessness in attitudes to learning and overcoming challenges. This has been the most notable change - it has had a massively negative impact on learning behaviour in Y9 - Y11 especially. Our middle/average students are the students at highest risk, in my opinion, and their results have shifted the most (negatively).

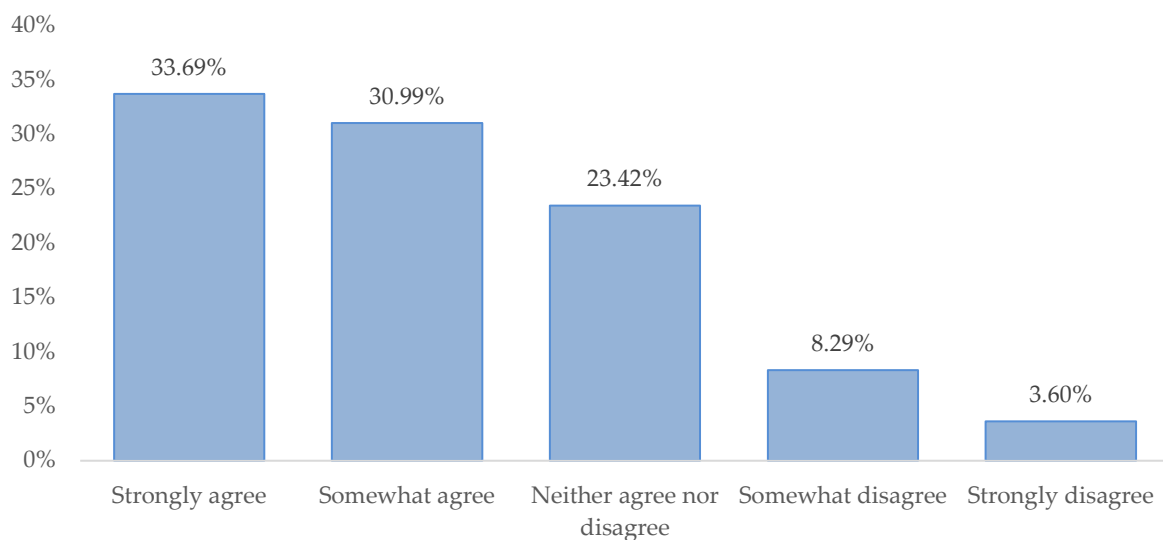
Figure 9. Students distracted by social media is a constant problem in the classroom (n=555).



Two thirds of teachers agree, to some extent, that student distraction by social media is a constant problem in the classroom. There are a number of factors discussed in qualitative comments about this. Factors influencing student distraction include: the nature of the device, level of interest or involvement in the task, general orientation towards both work and social media, age of students, possibly gender and level of achievement.

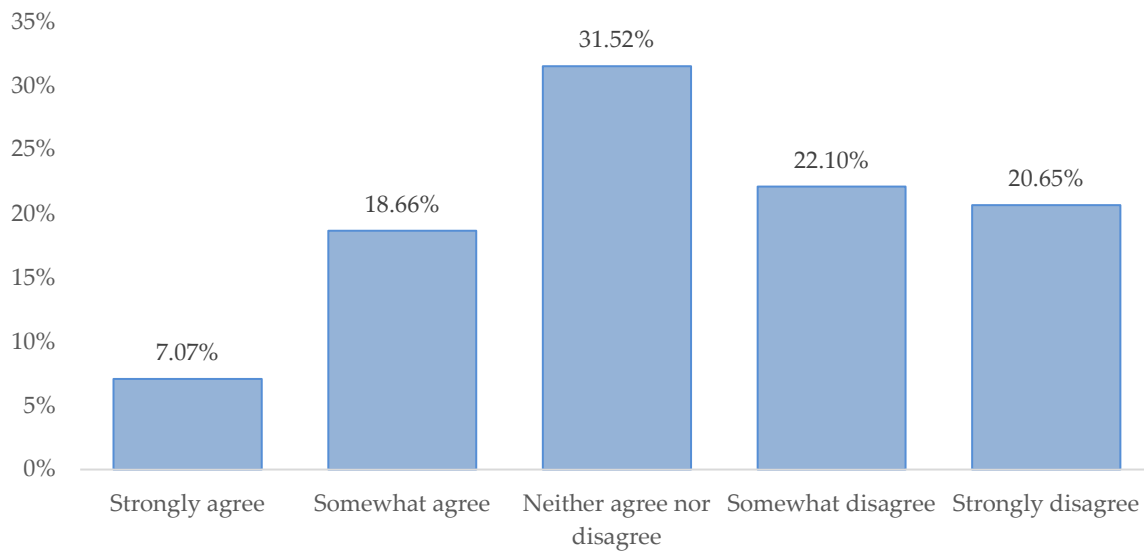
Opening the door for internet-based learning necessitates also opening up the whole of the internet. Access management, which appeared to have been virtually impossible during Covid lockdown, is an important element in classroom learning online.

Figure 10. It is better for schools to provide devices which are programmed for the work students need to complete (n=555).



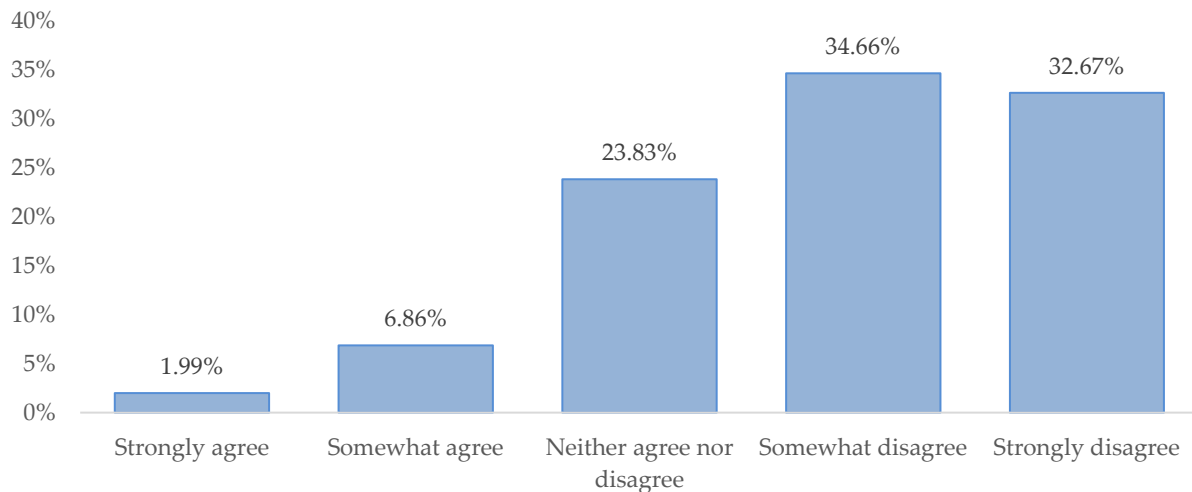
There is very strong support among teachers for schools to provide learning devices which are “programmed for the work students need to complete”. Two thirds agree and only around 12% disagree. This strong result indicates that teachers can see the value of devices in the classroom, but the distractions associated with these devices should be much more easily controlled by the school and teachers. The following question throws more light on the meaning of this finding.

Figure 11. It is better for students to provide devices themselves (n=552).



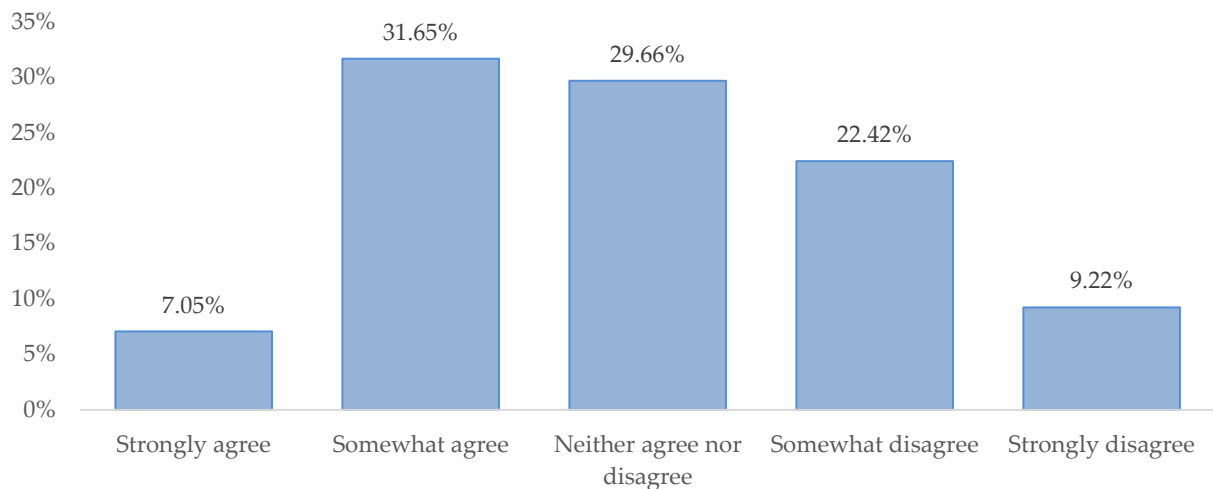
Around 43 percent disagree that students should supply their own device, while a third are not sure. Only 26 percent agree. This can be understood from the context of the previous questions. Most participants would prefer the school provide school-controlled devices for student learning, in particular to avoid the distractions of student-provided devices (but also to overcome the problem of device inequality). It seems that BYOD (bring your own device) to school has become for many students “bring your own distraction” from learning. This is one of the factors contributing to the situation of falling student outcomes described below.

Figure 12. Overall it would be better for students to spend more time on devices (n=554)



Overall, teachers strongly disagree that students should spend more time on devices. Less than 9 percent of teachers agree. 67 percent disagree, and 33 percent strongly disagree. This indicates very high levels of participant concern that further time spent on devices is unproductive to student learning, and in particular reflects concern discussed below that the switch to online and distance learning during Covid materially damaged educational performance.

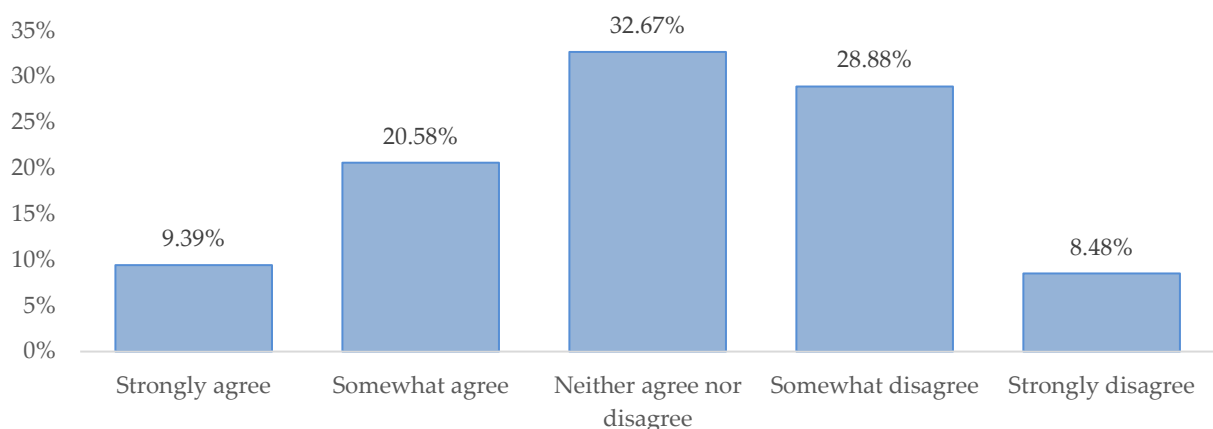
Figure 13. The good outweighs the bad for students learning on devices in the classroom (n=533).



Participants are not sure that the good outweighs the bad in learning on devices in the classroom. While nearly four out of ten agree, 30 percent are neutral while 32 percent think the bad outweighs the good. Influences on this response are most likely to be experiences of providing device-based learning under Covid and the overall growing learning gaps in schools. The following comment illustrates some of the issues involved in online learning on devices:

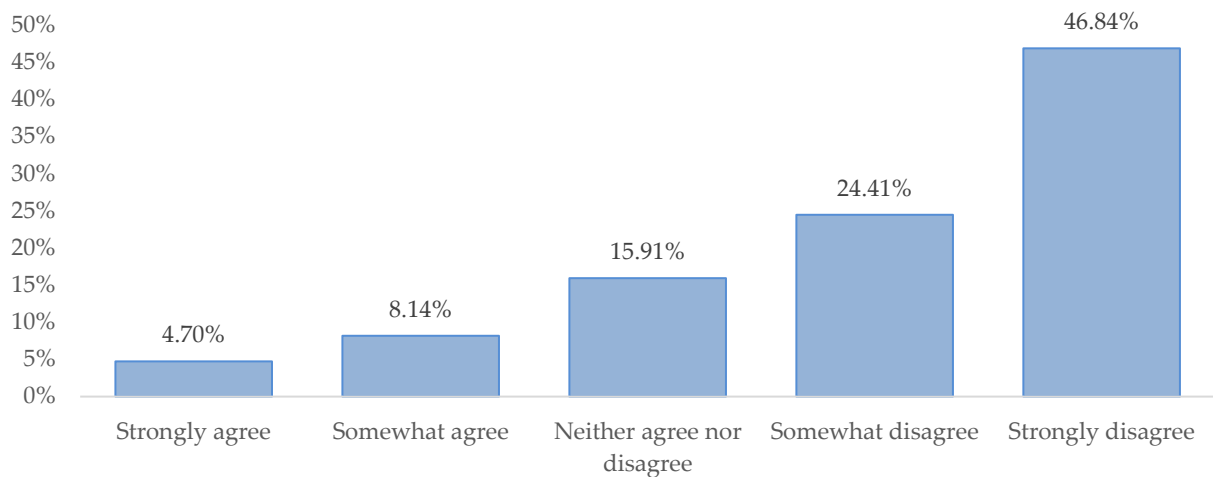
I taught high school science in a decile 3 Auckland school for 2020 and a decile 8 Auckland school for 2021. Both schools struggled to engage the majority of students while learning online, though engagement was much more difficult in the decile 3 school. All students I teach are achieving below where I would expect them to. None of my senior students are attempting all three external standards, and none are attempting Scholarship, after three years of disadvantaged learning and stress. The mental impact of the stress of COVID on students has affected engagement, socialisation, attendance and focus - even now with low levels of community covid, attendance is down and students aren't able to focus as well in class, so learning is impacted. These issues are bigger than one school - they are Auckland-wide after the huge lockdown last year.

Figure 14. The bad outweighs the good for students learning on devices in the classroom (n=554).



There is a similar three way split to the last statement as we would expect. In this case 30 percent agree the bad outweighs the good, 33 percent are neutral while 37 percent believe the good outweighs the bad.

Figure 15. I would prefer all devices were banned at school (n=533)



The response to this statement is broadly in line with previous comments. While teachers generally do not want to see all devices banned (although 13% do), nearly half of responses “strongly” disagree that they should all be banned. Mostly teachers want devices in the classroom, but issues of inequalities, student motivation, learning gaps, distraction and others need to be effectively managed.

Experience with remote learning

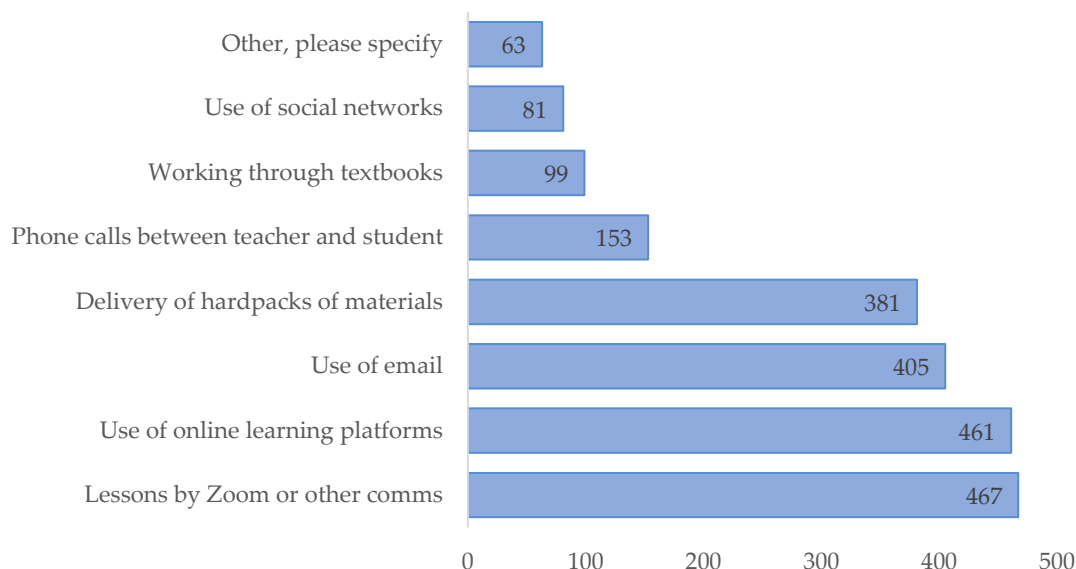
Participants were asked what prior experience they had in remote delivery of education (essentially distance learning). While around a third previously reported experience with ‘online or distance’ methodologies, when asked about distance education specifically, 70% noted no experience, and only 5% had a lot of experience, possibly reflecting those who had taught at Te Kura or on online networks.

Table 6. Teacher experience in delivering education remotely to students (n=555).

Answer	Count
A lot of experience	29
Some experience	142
No experience at all	384

The scale of the task – to transform a workforce of classroom teachers into distance educators is revealed in this response – nearly three quarters of teachers considered they had no experience in remote methods. On the other hand, many participants had used several of the methods that would become central to teaching under Covid, such as Zoom technology and online learning platforms.

Figure 16. Online methods used prior to 2020 lockdown (n=555).



Other methods listed included a range of programs, media and sites, such as Microsoft Teams, Zoom, Google classroom, Schoology, One Note, Education Perfect, Seesaw and many others. Teachers also used social media in innovative ways:

I made my lessons using short videos on my YouTube channel and then posting the links to those. They were linked into questions in their workbooks. This worked well for me.

Other comments included:

The school delivered Chromebooks to students for use at home. This allowed us as teachers to place slides and work on Google Classroom.

I had already made websites (as complete course books for year 11-13 before covid existed). The school was supplied with just Google Classroom.

Hard copy assessments with resources - given to students prior to going home for Covid - and the same assessment etc also on-line.

I gave a 30 page slideshow with suggestions of activities that covered the curriculum.

One teacher documented efforts to find an effective approach:

Tried Zoom (lot of effort for only 4/60 students to attend). Hand wrote lessons, sent photos to students via email, sent worked answers (Maths) to parents by email. Delivered workbooks to all my students (280km) after feedback from Parents/Students: siblings sharing devices, poor internet, no internet/devices (different from the official MOE list), sick of online learning. Students were encouraged to write down questions & email photos to me. Worked really well, especially keeping the parents in the loop. Took a while to create database of student and parent emails, but delivery (BCC) took 5 minutes for 5 classes.

Other notable responses included the delivery of food packs along with classroom resources and the difficulties some rural (and some urban) teachers faced in establishing good online connectivity with students.

A number of teachers outlined the difficulties they faced in moving to online teaching:

As a beginning teacher during COVID I had little experience of teaching without the expectation of online learning/having digital resources available. In many ways 2022 was hardest as schools had an expectation that teachers provide both online and in person material. While my school utilises 1:1 devices, it was tricky to offer similar programmes as my own teaching style involves a lot of 1:1 and class discussion (which is virtually impossible digitally). The MoE attempted to provide resources and support but ultimately I feel that teachers had to figure a lot out within their school as the MoE struggled to accurately identify what needs existed.

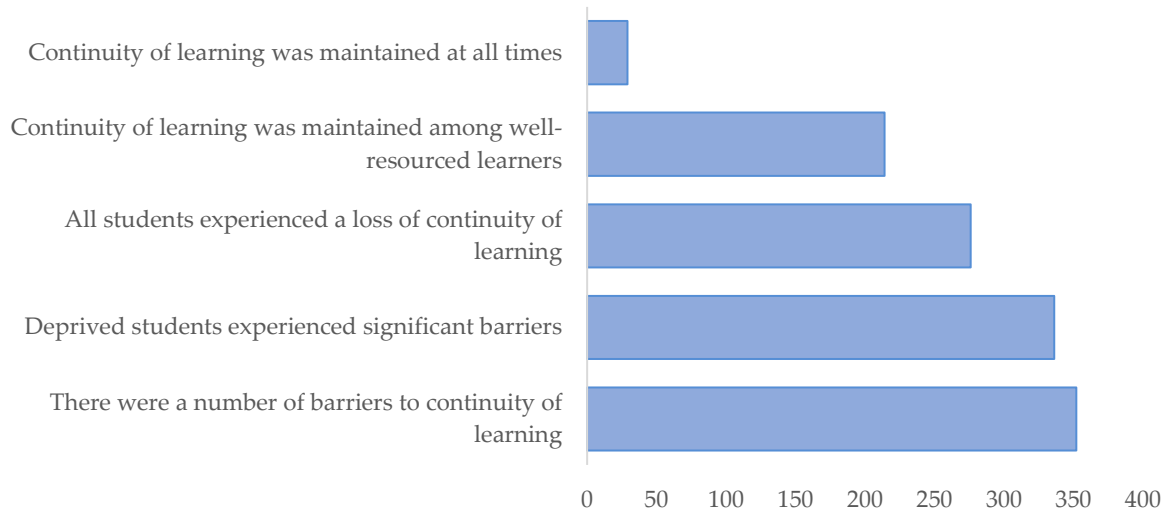
It should also be noted that even experienced online teachers faced significant difficulties in delivering the curriculum under Covid conditions.

I have taught using online LMS resources and in class resources for at least the last decade, which made transitioning to full learning on line easy for students and myself. 2020 and 2021 went well and my results were the same as previous years. It is 2022 where the topics and work completed has been reduced because students were sick with covid, some getting covid, then flu then covid again. It was much harder to teach both in class and online for students sick at home at the same time, and hours spent were much longer.

One teacher noted her pleasure in the effectiveness of online learning:

AMAZING to meet needs of students where they were at and have time for one on one work. I also had my own child in Maori immersion and she was well catered for.

Figure 17. In your view, how effective were these methods overall in maintaining continuity of learning for your students? (Tick any that apply) (n=552)

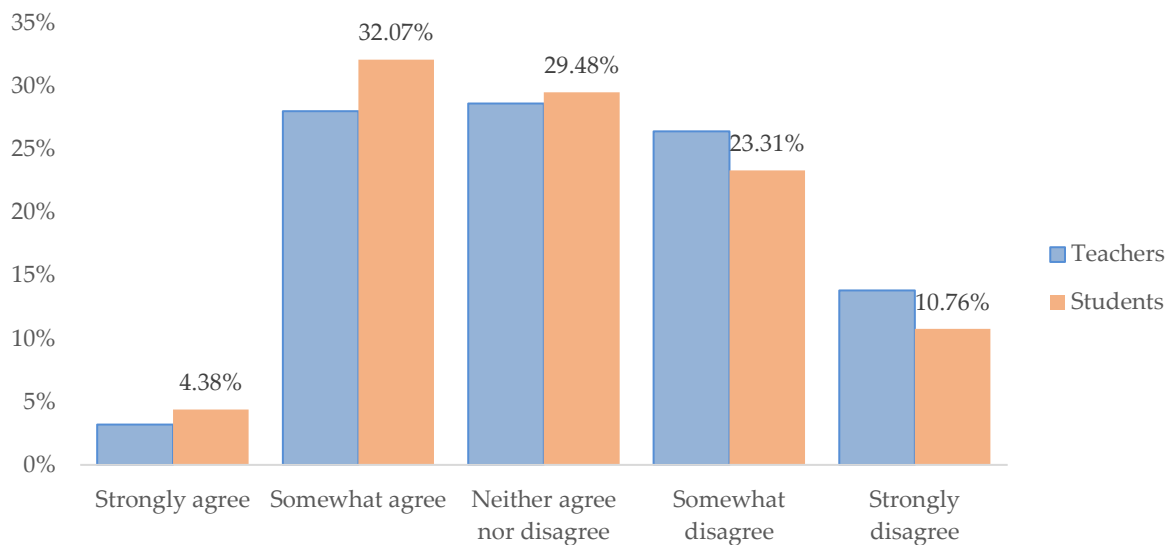


Only 29 out of 555 participants thought that student continuity of learning was maintained at all times for all students. Generally, well-resourced learners maintained learning continuity to an extent. Deprived students experienced significant barriers and overall a number of barriers existed. Over half of participants noted that all students lost continuity of learning. One participant noted a more complex picture:

In my experience during online learning it surprised me that some of the most distracted students in school really excelled during online learning. In that same class, a few of the strongest and independent learners really dropped off. They said they had a hard time getting out of bed or found it hard to feel motivated to do much. There was a lot of complaining about amount of time on their device and work that had to be done. Many were not self-starters nor managed their time efficiently or effectively. Those who didn't understand most often didn't seek help or held back and then dropped off. Parents would say one thing and do another. Kids were sometimes offline for a 'break'. Overall, the students struggled with the amount of learning opportunities and really picked and choose what they did. This meant a lot of gaps and made it difficult to build on skills e.g. in writing.

Participants were asked their opinion on the proposition that teachers, and students, were well-supported for online learning. A small proportion (less than 5 percent) strongly agreed, with a third agreeing to the proposition. The majority were unable to say that teachers or students were well-supported.

Figure 18. Agreement with whether teachers, and students, were well-supported through online learning (N=553)



Students were considered to have been slightly better supported than teachers, with many participants outlining Herculean efforts to get resources out to students:

I am proud of how our staff pulled together to get packs ready for students and deliver them. Our learning assistants all took part in teaching of students and they received no devices from the school to do this. They did have the ability to claim back costs incurred for phone calls or extra internet usage. Our students were heavily disadvantaged as many do not have computers at home and only their family cell phone to work on which meant that they may have done work for two days a week for 30 mins. The ministry packs were not suitable for students with diverse needs but the school provided printed packs that a small team delivered to letterboxes. Budgets were eaten up with printing costs to ensure our students had a continuation of work as that was seen as one way to not only support their learning but to also take their mind off what was happening with Covid.

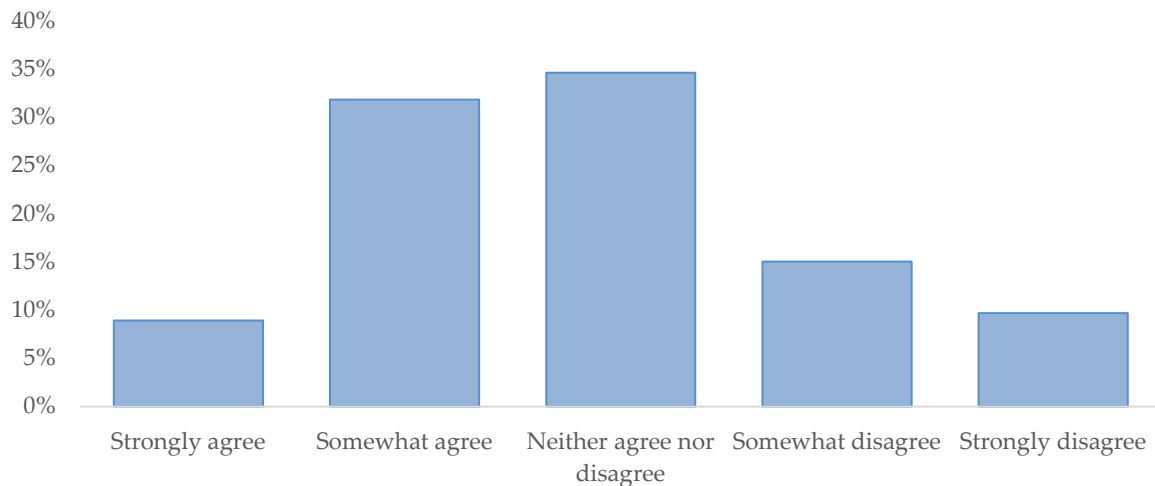
Some teachers felt that all the emphasis was on student and whānau wellbeing and not very much on teacher wellbeing:

The amount of time teachers were expected to be teaching and available to students meant sitting in the chair all day planning, teaching, supporting, emailing, calling etc... At the end of the day I was thoroughly exhausted. It was an unsustainable expectation put on teachers. Much of the concern was about student and family wellbeing but then forgot to factor in the wellbeing of teachers who are in the same category. Unfortunately, kids missed a lot of people contact and learning together at school; as did much of the rest of the world. I felt too often we tried to continue doing what we have always been doing as educators not taking into consideration the unusual times and the effects across society; it has led to increases in anxiety, worry and poor mental health and well-being.

The following questions related to teacher views about the resources offered to assist in the shift to online and distance learning.

There was agreement that the hardback resources provided by the Ministry contained useful learning materials for students – only a quarter of participants disagreed, although a third had no opinion.

Figure 19. Agreement that the hardbacks provide good learning materials for students (n=554).



However, there were also a number of criticisms of the hardbacks. They arrived at the end rather than the beginning of lockdown, students did not always get the right pack, they were not available in many subjects etc. A common critique was that the hardbacks were not sent to teachers:

I had no idea what was in the packs my students received as they were not provided to me.

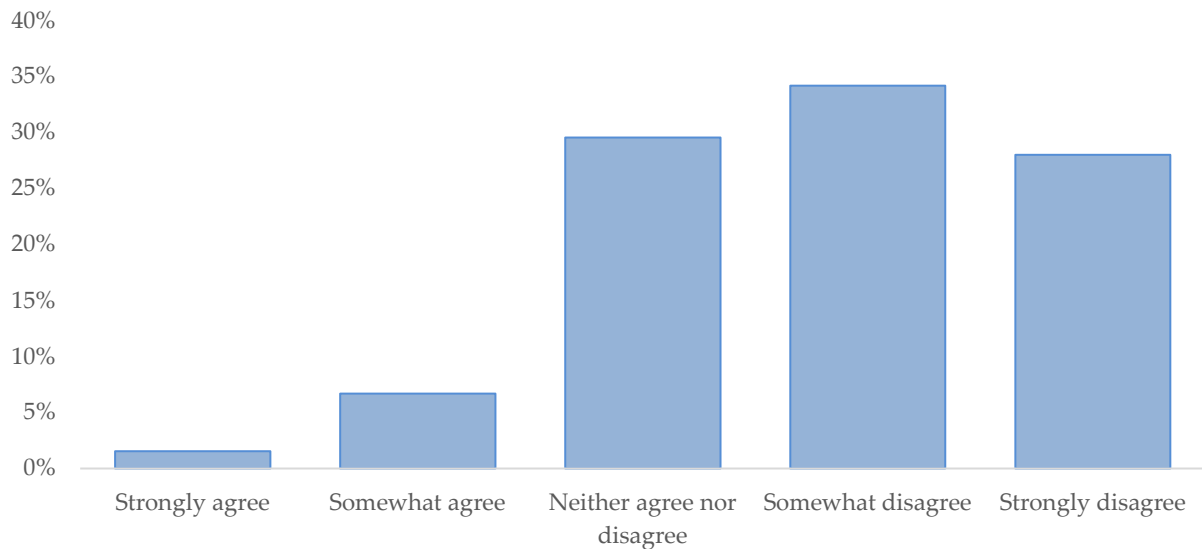
Government hard packs were delivered to students far too slowly. As the teacher I had no idea of what had been delivered so could not easily assist or suggest/set work.

Learning packs and devices and Internet that were promised weren't received in many cases. There was a huge stuff up with deliveries. Our devices ended up at different places all over the country. Students got wrong year level packs or none at all. They were based on year levels not ability.

Our tamariki received the MOE learning packs after the lockdown, so they were of no use. When they did arrive, the work was generally too difficult for the kids to complete, especially for those who received little input from parents/whānau who could not help or were having to juggle work at home.

Not surprisingly then, that while the packs were seen by many to contain good materials for learning, the barriers experienced meant that most teachers did not agree that the packs replaced classroom learning effectively, as Figure 20 shows:

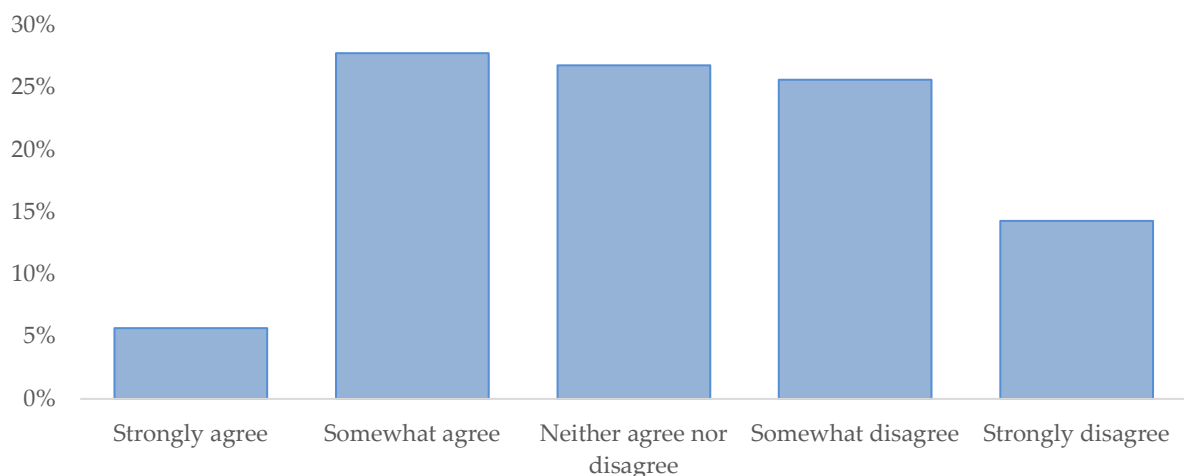
Figure 20. Agreement that the hardpacks replaced classroom learning effectively (n=555)



While there was concern that hardpacks did not replace classroom learning effectively, there was quite a lot of support for education TV, with a focus on younger students. Qualitative comments referred to Papa Kainga TV and Mauri Reo, Mauri Ora, a te reo Māori platform. Over 40 percent of participants agreed that the service was great, with 36 percent neutral and around a fifth disagreeing. All of the resources developed now reside on the TVNZ+ platform and will continue to be available. None of the participants mentioned whether they were able to integrate these resources into the distance curriculum during lockdown.

Teachers were asked to comment on whether assistance provided for students with computers and internet access was excellent. The results are summarised below.

Figure 21. Agreement that assistance provided for students with computers was excellent (n=555)



The responses outlined above reflect some agreement (around a third) with the proposition, but also significant disagreement. No-one disagreed in qualitative comments with the idea that devices and internet connections should be provided to students that needed them. Comments related more to the barriers and problems: people in need not getting resources; difficulties with

access to and cost of internet; teachers having to provide a remote computer setup and operation service that they were not qualified for; other family members taking over use of Chromebooks for their own work in lockdown; significant problems of connectivity and capacity of internet and a range of other issues. The problems with student motivation and distraction around use of the internet are discussed below.

It showed a big gap between the haves and have nots. Generally my higher level students had devices and were motivated to keep up. My lower students had no devices or were unmotivated which created a bigger gap.

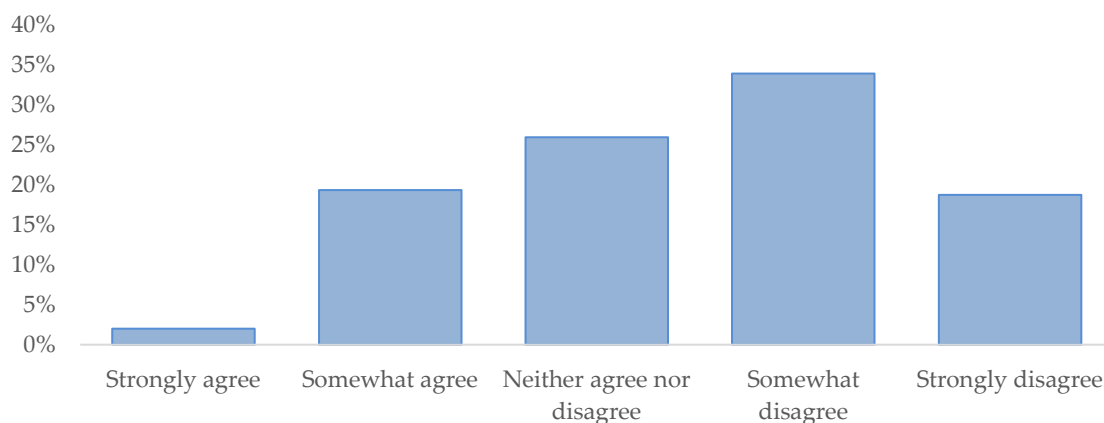
As a higher decile school we were expected to have all the devices for the children. We did not have enough for the demand. Remote areas had no access to internet so hardpacks were essential. However because we were high decile we got these last. Our teachers went above and beyond to deliver materials to the families that didn't have access to online learning.

Students with learning needs completely missed out on online/distance learning. Students with no internet and/or devices missed out especially those in higher decile schools who were last on the list for MoE support for devices and hard packs.

Working in a low decile school. Many students had no devices or shared devices. Many had no Wi-Fi. The hard packs were too hard for them and required support - very hard to do over the phone as our students need scaffolding as poor readers and writers. I feel devices can give a quick answer but student who are poor learners don't read more or even understand what they find. Devices seem to stop perseverance. We phoned our lower learners at least 3 times a week. Often unable to get an answer or if we did students not really engaging. I feel many unknowingly were traumatized without the structure and routine of school.

The final issue in this section was how students used online resources. The overall view of participants was that there was a large gap between provision of resources and their use, for most students. Only 20 percent of participants agreed that resources were used effectively. There was a strong view that despite the efforts of teachers, whānau and schools, online learning under Covid was very ineffective for all but a small minority of students. Numerous reasons were given for this, which are discussed below.

Figure 22. Agreement with the proposition that students used online learning services effectively (n=554)



Increased use of devices has resulted in students having fractured focus - they flit from one thing to another with no sustained effort. In an ideal world, with motivated, already literate students, capable of critical thinking, online learning could work well, but it does not work well with teenage boys who would rather be gaming and who cannot even read or follow basic instructions. While our school was able to ensure that every student had a device, I am not sure about every student having equal and freely accessible internet service at home, nor did all students have a quiet space to work without disturbance from siblings or others.

I think online tools are great but relationships drive education and they were not the same in lockdown. I also found that even the best students struggled to work without their peers and the extra check ins that in person learning offers. Zoom made them feel uncomfortable and teaching to a blank screen was emotionally exhausting.

The use of the Zoom platform and Google Meets came in for particular comment both for its strengths – the ability to bring a class together face to face – and its weaknesses. A key weakness was that “some students do not like seeing themselves on zoom platforms”, a comment repeated frequently. This led to some disturbing and bizarre effects for teachers:

I also noticed that there were less students at online meetings early in the day and more later in the day. I suspect they were up late and sleeping in. Many teens wouldn't turn their cameras on so I wouldn't see them, just know they were listening. I found it very weird not seeing them as I wasn't getting any visual feedback on how they were receiving what I was saying. I felt like I was talking to myself at times!

Students who did show up often did not want to talk or otherwise engage, and most had their cameras and sound off so I couldn't see if anyone was there. I used the chat function to interact with students. They appeared disinterested and lethargic.

The online learning was effective for those who attended regularly. But student reluctance to reveal themselves visually in the online chats meant I received little feedback to the online lessons & the usual Q & A & other interactions were missing in this environment - making it less effective than the usual, personal face to face lessons.

A number of comments noted that weak Wi-Fi reduced opportunities for engagement. While this was primarily a function of rural connectivity, with, in some cases, students having to drive the family tractor to the top of a hill to get a connection, it also occurred in families where two parents and two or more children were expected to be on online platforms or call at the same time. There was also some dissatisfaction over the general efficacy of Zoom as a teaching tool:

What I learned as a teacher and as a learner during the ZOOM experience is that F/F teaching and interaction is far superior to electronic - and ZOOM is both second rate and over-rated.

Participants reported that engagement online did not improve over time. Instead, it declined. This decline has been exacerbated during 2022 when the return to school has been punctuated by student non-attendance and ongoing sickness:

During Covid lockdowns or rostering home, students quickly fell into a pattern of late nights of gaming and then not getting up in time for scheduled Google Class Meets. The

longer things went on, the fewer students fronted for Google Class Meets and video cameras were largely left off. There was insufficient time or PLD available to help staff to deliver teaching content effectively online. Since return to school, Covid and other respiratory illnesses have kept many students out of class, and the amount of teaching and learning time has been considerably reduced. Just issuing Covid credits is no solution to a basic problem of lack of knowledge and skills.

Support and resources for teachers

The study has already canvassed the enormous change in the nature of teacher work that took place from 25 March 2020, when teachers were required to switch from in-class to online mode for all teaching and learning tasks. The very nature of online learning was problematic for some teachers, especially those working in practical subjects such as drama, technology, and PE.

Distance learning was manageable for core subjects, but those of us teaching practical subjects, especially those needing specialised equipment/materials (tech, Art, Music, Drama) it was near on impossible. My classes are massively behind in music unless they had access to an instrument.

It is so different teaching a physical movement class (dance or PE) online than a seated desk class. I feel almost all the PD and resources went into core subjects (once again) that are seated at desks.

Some participants also noted that students had particular problems with certain subjects, posing particular problems for teachers. Mathematics was cited as one such:

Up to a third of each of my classes did not engage online. We recorded attendance so most showed up but then did not engage or attempt any work. This was common across all maths classes. Except for motivated students, the rest stated they found it difficult to learn maths remotely and found face to face much easier. Some resented what they perceived as their personal social tool being co-opted for class work.

All students surveyed at my school found it challenging to learn Mathematics without the rich discussions and opportunity to readily seek help that they would normally get in the classroom.

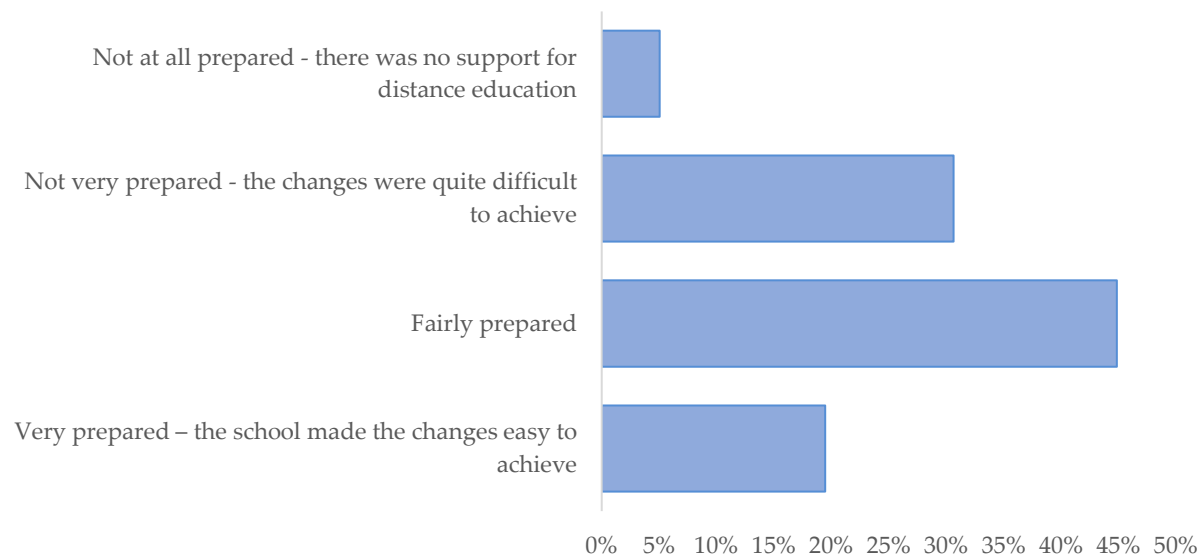
Some participants discussed a lack of support for those working as teachers, aides and support staff for children with disabilities.

I am disappointed in the support, or lack thereof for our neurodiverse students and those in special schools. They require higher levels of learning support and resourcing and got the least. The pressure this placed on schools and teaching staff was unbearable and often overwhelming. We were expected to continue to be available to support others with no support for our own household needs. Many of my colleagues burnt out and some left the profession. Instead of teacher workload reducing, it doubled and has not yet returned to pre-Covid expectations. We are expected to do more with less.

Working with special needs children online relying on families to be able to motivate the children to be available and this is a large stress on support staff to push but we were told if we didn't do it then we didn't get paid. A very stressful and exhausting time.

In the discussion below on online vs face-to-face learning, teachers discuss the full range of concerns with the online mode. Most found the abrupt shift complex and stressful, so an important element for them was the level of support provided by their school. They report variable levels of support of teaching in lockdown.

Figure 23. How prepared was the school to support you to meet the requirements of teaching under lockdown conditions? Please choose the best single response n=555



There were many differences between schools in the support given to teachers and for online learning. Some of the differences between schools are covered in the following comments:

Schools were under-prepared but key members in teams managed to support their syndicates e.g. team lead, although not all team leads were skilled enough to do this. There was no consistency of expectations across schools- and within specific schools. Some teachers did too much and others did too little.

Our school put too much pressure for distance learning, not really caring for their staff's wellbeing. We had to zoom 5 year olds 5 times a week and provide extensive Seesaw learning, comments and marking. We had deadlines to meet with planning and not enough time to prepare. Compared to other schools who only zoomed twice I felt too much pressure was put on our staff to deliver at the expense of their wellbeing. There needs to be regulation within the sector and specific guidelines e.g. zooming once a week only so there is a balance for all teachers.

I changed schools between covid and noticed a huge difference between a central Auckland school and the semi-rural school I moved to. Children in the semi-rural school were not online as often and there was a definite lack of devices for all children, even though the school did what it could to distribute school devices. There was uncertainty around progress but an underlying pressure for children to maintain for make progress. This has impacted 2022 because we are playing catch up.

For the first lockdowns I was teaching in a very well resourced school in Auckland. We were well prepared before any lockdowns for online teaching, the students had been prepared too and so the transition was smooth. Lessons happened as usual, with roll being taken at the usual times and emails to parents if a student was not online at the usual lesson time. Lessons were taught as close to normal as possible and engagement was often higher than in class. In the end of year external exams, results were considerably higher than previous years. From May 2021 to December 2021 I was in a lower decile, state school in Canterbury. During lockdown the direction from the school

was to "take student wellbeing into account" and provide no lessons - the HoD would give out one short task per week and there was no expectation to do it. Students could check in with teachers on a voluntary basis. This felt more like abandoning our akonga and leaving them isolated. From a pedagogical point of view I strongly feel this has exacerbated inequalities in our society.

There was no one way for schools to approach online learning. It's interesting to note that my husband and I work at two different schools that had very different approaches to online learning. The school I work at tried to keep learning as consistent as possible by following timetabled and scheduled lessons and always having a Google Meet, even if just for a few minutes. As such, I feel the students were able to return to in-person learning at least a little more successfully. At my husband's school, teachers put work on a centralised website each week and students worked at their own pace. There was no requirement for Zoom lessons, though they were encouraged. As a result, he feels that the students' learning has suffered more overall.

I taught high school science in a decile 3 Auckland school for 2020 and a decile 8 Auckland school for 2021. Both schools struggled to engage the majority of students while learning online, though engagement was much more difficult in the decile 3 school.

My school I felt had reasonable expectations of teachers, including the understanding that we can only try to engage the families that much. Some of my colleagues from other schools were expected to be on Zoom throughout the day, teaching lessons as they would in class, plus they were expected to be available out of school hours. Perhaps a nationwide set level of expectations may need to be looked into, taking into account stressed parents, needing to do their work, and who are NOT teachers. I enjoyed the online engagement, but unfortunately only between 40-60 % of my class participated.

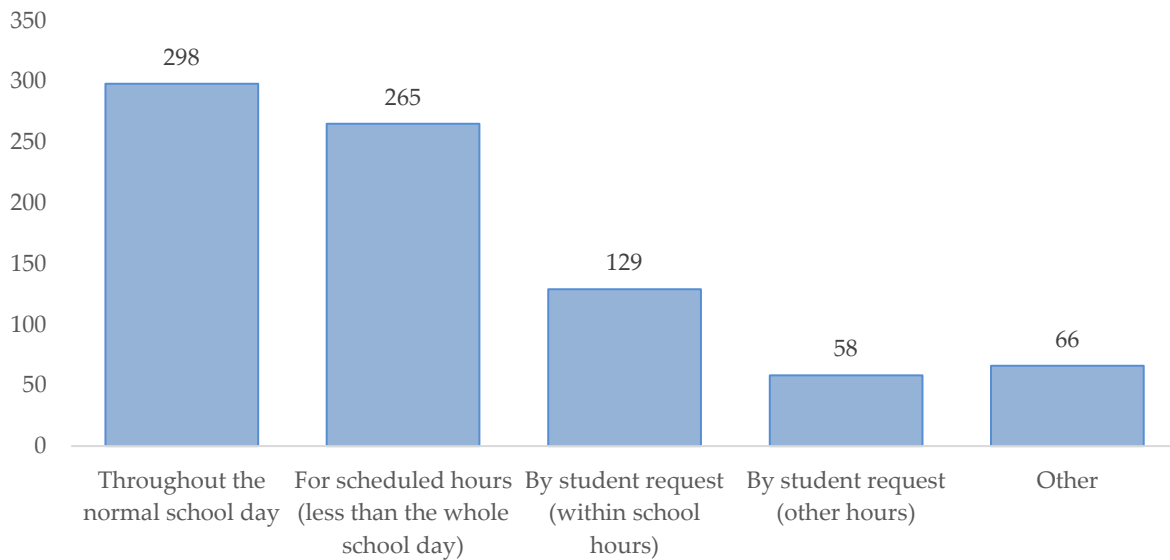
Different schools had very different expectations of staff and students. Realistically it was difficult as a teacher to carry on online with pressures within your own home. Once we got back to school we had to re-teach everything that had been online anyway.

Those who have experience across more than one school are able to point to some of the differences that characterised individual school responses to the shift to online learning under Covid. It was not so much that some schools did well and others badly, and there was obviously a range of factors to be taken into account due to the context of the pandemic.

But there was an obvious gap in national educational leadership that might have steered all schools towards best practice, as that perhaps was emerging internationally and in Aotearoa. There was no educational equivalent of the Medical Officer of Health, for example, on TV every day updating progress and providing ideas for successful education. The main victims of individual school approaches were the teachers, some of whom found they were working to impossible agendas for unsustainable hours.

There was also a strong feeling among some teachers that school leaders were not paying enough attention to teacher needs, especially where teachers' tamariki were of school age and they were trying to educate their students while managing their own locked down whānau.

Figure 24. When were you expected to be available online (e.g. via Zoom, email or phone)? Tick any that apply.



Participants responded in two ways. One group noted *their school's* expectations or lack of expectations. The other group listed *their own time management*. Overall, participants reported five differing and sometimes overlapping drivers:

- school statements and expectations (37 percent of total responses on various topics within this question)
- teachers' individual management (32 percent of total responses on various topics within this question)
- parents' requests, invitations, pressure
- students' conditions, situations and demands
- community conditions, especially differing availability of electronic resources

Many reported their work expanding through the day beyond scheduled school times, both early and late. Some shifted their workdays accordingly. Some listed working "24/7". Some reported that both stated expectations and lack of expectations could lead to "working all hours."

School expectations

Teachers reported "an expectation to be available during the timetabled period," "only scheduled hours," "normal class timetable," "[on Zoom calls at] specific class times" or "throughout the school day via email," "8 until 4pm." Some requirements were based on weekly schedules: e.g., "each child one hour on scheduled time per week," "required to have one Zoom a week," "1 lesson per week for each class" and "one google meet per class per week."

By contrast, some schools gave no lead to teachers. They noted, "no guidance or set times were given," and "there was nothing stated."

There were consequences to both sets of conditions, mostly in increased hours of work. Following school calls to meet scheduled hours, "to support individual students – this turned into many more hours." The 8 to 4 shift turned into "earlier and longer starts." Where there was no guidance from the school, "my colleagues and I did longer hours."

The need for staff meetings created early and late demands on teacher time: "We also had multiple online staff meetings before and after the school day."

There were also situations that created flexibility and accommodation for teachers, for instance over the time of different lockdowns: "There was "no clear communication around expected hours in the first lockdown," said one, but "timetables were created for following lockdowns." One response reported, "I was asked to make it work in a way that worked for me. I was grateful for the flexibility." Another said, "The school changed the timetable to have less lessons per day."

However, one participant reported the following message from the school:

We were told we were lucky still being paid throughout so expectation would be we would be available whenever anyone wanted to contact us.

Parents

Parents were a factor in use of time. Some requirements were "By parent request (within school hours)," whereas different timing also held: "By parents after hours." Or as one teacher noted, "At any time parents requested!" An account of parents as mediator appears in this brief description: "As I teach 5 year olds, much of the communication relied on parents' interaction with the teacher rather than students'."

Teacher initiative

One teacher created a schedule of weekly tasks via video and online, which "saw the best results," contrasted later with fitting into "an online video meeting at set class times," which saw much less engagement or completing work.

Another teacher described a process of teacher collaboration:

Different teachers had different arrangements depending on the teacher's home circumstances. I had no one else to care for and so did a lot of online direct delivery to students whilst colleagues who had young children to look after often did the preparation work for others.

Students, teachers and resources

A consistent theme was students' use of time, which affected the teachers' schedules. As one teacher reported, "A lot of students decided to be active from 5-10 at night so I made myself available when the students were." Another said, "It varied due to the fact many of my students worked during lockdown." A different comment tied procedure to desirable outcomes: "Most of us were available via email outside of school time to respond as quickly as possible when students were asking for help with the idea of increasing student engagement in the work." As one teacher suggested, they worked in the evenings "because it was when they were engaged best."

The situation was complicated by a lack of electronic resources in students' homes: "Not many of my children accessed what I put on our webpage. Not enough resources in the community." There was an echo of this conclusion in statements like, "Our interactions online were very limited due to limited internet in households and data restrictions." Similarly, there was reference to teacher schedules that were "timetabled so those with siblings didn't have clashes if there was only one device in the house."

One teacher summed up their issue of time pressures from teaching online as:

...teaching online was far more time consuming, it had me working all day with few breaks, and little down time as students tended to work in afternoons and evenings, when I needed to not be working I had to work. It was very difficult and there was no finish time for each day, work all day. . .

Some teachers reported that being online the whole of the working day was immensely stressful, caused headaches and sickness and brought with it huge frustrations in trying to motivate students, who were often disengaged. There were also issues with internet connectivity in large families and in rural areas, for example:

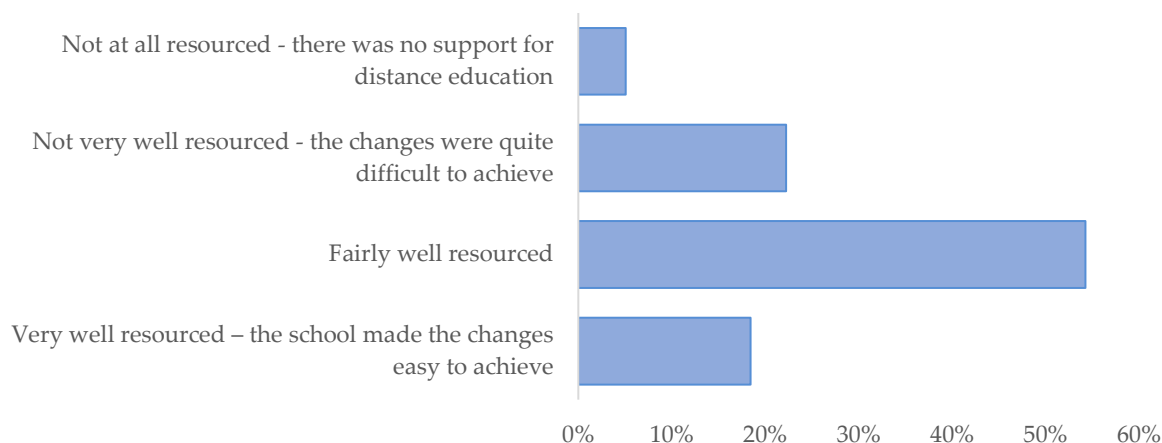
I live in a rural area with a very poor internet connection so teaching online from home during lockdowns was incredibly stressful. I also had a huge increase in my wifi bill, as I had to pay to do my job online. Teachers were given a massive amount of extra administration work to do which was extremely difficult to complete, given the circumstances. The emphasis was purely on student welfare and their learning. Very little, if any thought, appeared to be given to the welfare of teachers.

Those in rural areas had poor internet, in fact my own home internet struggled with my entire family online at the same time meaning classes would drop out or lag making classes tedious at times.

In addition to issues around leadership and approaches to teaching, was the level of resources schools were able to gather to support the shift to online and distance learning. Such resources include the ability to access and deliver devices across the school community, hardpack and online classroom materials, access to learning apps and sites and a range of other material resources. Some schools went much farther, providing food packs and other resources to whānau and supporting teachers with increased costs (e.g. internet and petrol) financially.

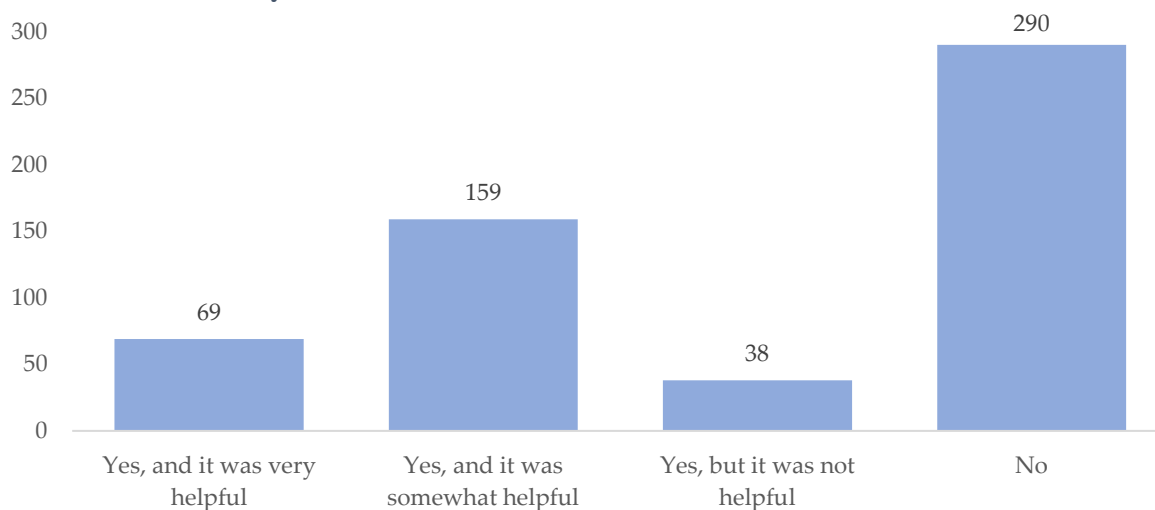
Figure 25 shows that most teachers (75%) felt that schools did provide the resources needed to support teaching requirements under lockdown, and one in five schools “made the changes easy to achieve”. For a quarter of teachers, however, there were inadequate resources or no resources at all to assist teachers.

Figure 25. How well resourced was the school to support you to meet the requirements of teaching under lockdown conditions? Please choose the best single response n=553



Around half of survey participants did receive specific professional development to assist the online delivery of teaching, although the other half received none. A small number (13%) found the PD they received very helpful, and a further 30% found it somewhat helpful.

Figure 26. Did your school provide specific professional development to enhance your role in online delivery? n=556



It is somewhat surprising that such a huge shift in teaching methods was not accompanied by a massive programme of professional development. Participants reported that the first lockdown was accompanied by enormous goodwill and realistic expectations:

The implementation of online learning was sudden and reactionary to the issue. The lack of support in this regard, at the beginning, was understandable since the virus was new and the lockdowns an unfamiliar context. However, over the course of the several lockdowns the expectations on teachers only worsened. This has been further exacerbated by expectations that we will completely return to normal this year despite covid still significantly impacting staff and student absence.

The first lockdown was OK because our school's expectations were very low (ie: "let's just get through this the best we can")...

I think the first lockdown went well. Students engaged and there was little loss of learning. This was not the same in the second lockdown. Parents were incredibly supportive during the initial lockdown and brought the school/whānau relationship closer. I think this year was the hardest because students were not all out or all in at the same time. I thought the initial lockdown was amazing for upskilling staff. All our staff use Google Classroom now as a standard tool for sharing resources.

However, many report much more difficult teaching and learning conditions in later lockdowns and especially in 2022:

As lockdown (2021) went on, students became less and less engaged. This year, students definitely have significant gaps in their knowledge and skills, and many are unmotivated and appear disinterested. They still want credits (damn you, NCEA! It's just always about the credits, isn't it) but seem to have unrealistic expectations about how they can be

gained, and often don't participate in preparatory or learning exercises. It has been a frustrating and stressful year as a consequence.

As a beginning teacher during COVID I had little experience of teaching without the expectation of online learning/having digital resources available. In many ways 2022 was hardest as schools had an expectation that teachers provide both online and in person material. While my school utilises 1:1 devices, it was tricky to offer similar programmes as my own teaching style involves a lot of 1:1 and class discussion (which is virtually impossible digitally). The MoE attempted to provide resources and support but ultimately I feel that teachers had to figure a lot out within their school as the MoE struggled to accurately identify what needs existed.

The Ministry of Education worked to provide a range of resources including cash for schools, devices, learning packs, TV, educational online resources and the like. Participants in the survey were asked whether the funding assisted with equitable outcomes overall and with students with diverse needs and those in the bilingual or immersion settings. Responses are summarised in Table 7 below.

Table 7. Agreement that Ministry expenditure met a range of learning needs (n=553).

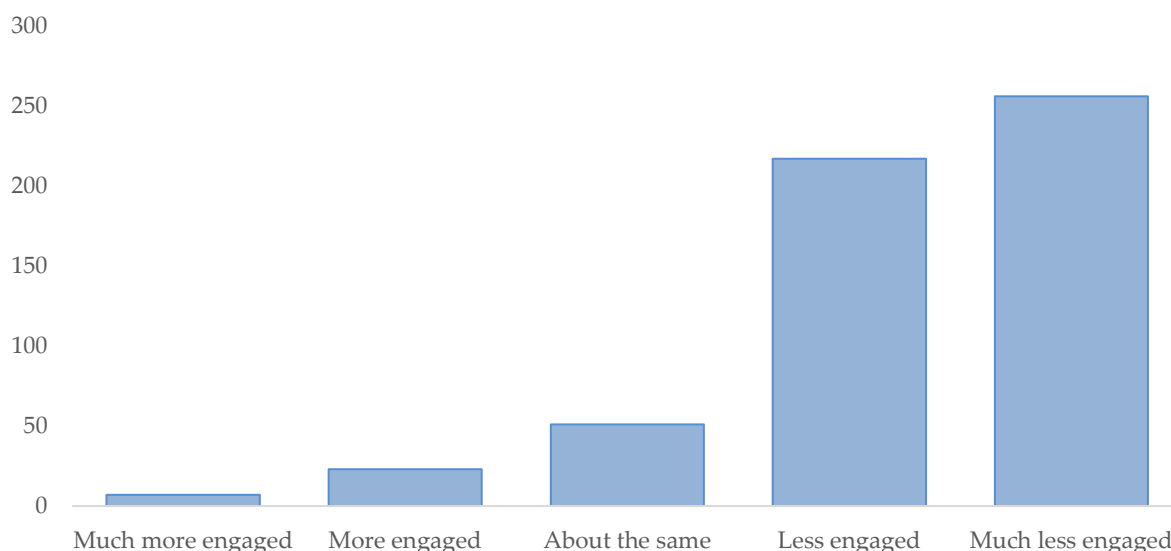
	Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree
The Ministry's expenditure ensured equitable learning during Covid lockdowns	2.39%	15.90%	27.04%	28.83%	25.84%
The Ministry's expenditure ensured additional support for children with diverse needs.	1.43%	11.45%	30.47%	27.81%	28.83%
The Ministry's expenditure ensured additional support for those in bilingual or immersion settings.	1.50%	7.21%	51.05%	16.52%	23.72%

More than half of participants disagreed that Ministry expenditure ensured equitable learning or additional support for diverse learners, and 40 percent disagreed that it ensured additional support for those in bilingual or immersion settings.

Student engagement and academic progress

A central finding of this study is that participants report low levels of student engagement in learning now, compared to before the first Covid lockdown. The core result is set out in the figure below and shows that more 80 percent of students are less engaged compared to before the first lockdown.

Figure 27. Level of engagement under Covid compared to prior classroom learning
n=554



Engagement was one of the key themes discussed by teachers in the open-ended qualitative responses.

Many students went 'missing' and did not engage at all. Engagement was very low.

The biggest issue was engagement. Student had to take more responsibility for their own learning. And sometimes, the student were not online or doing their work. There were many challenges they may also have at home e.g. the number of family members at home, their responsibilities at home, etc. Overall, a lot of students' learning and progress was impacted negatively with staying at home and learning at home.

The first lockdown saw many students jump online when they could but engagement was spotty even though we were to cover our whole curriculum -- what we were to teach in class as normal was in the end what we were expected to cover online... With every subsequent lock down student engagement got harder and harder to maintain at secondary level.

I teach middle ability children. most of them made no attempt to engage with online work during lockdown. On their return they acknowledged this quietly to me and said 'Miss, I'm back and I'm ready to work. It was too hard and too boring to work online'

Students from lower socio-economic backgrounds were not supported. Less than 6 out of my 29 students engaged in 'any' kind of learning during lockdown.

During lockdown, we had Google Meets where about 5/26 students would show up! Students who wanted to work, did, but so many seniors did not complete internal assessments so did not even submit any work!

It didn't matter how hard the teachers worked to adapt and provide resources, ultimately there was very little we could do to engage the students when they simply didn't log on. Either because of family situations, mental health, or simply doing other things online such as social media and gaming. The lack of engagement and poor attitude towards their learning has persisted since.

Distance learning seems to work for motivated students who already have good self management skills. Of all my students who were generally less engaged, only 1 improved under online/distance learning (lack of distractions from peers). Most ended up "checking out" completely. Quality and responsive feedback was also more challenging and time consuming to deliver.

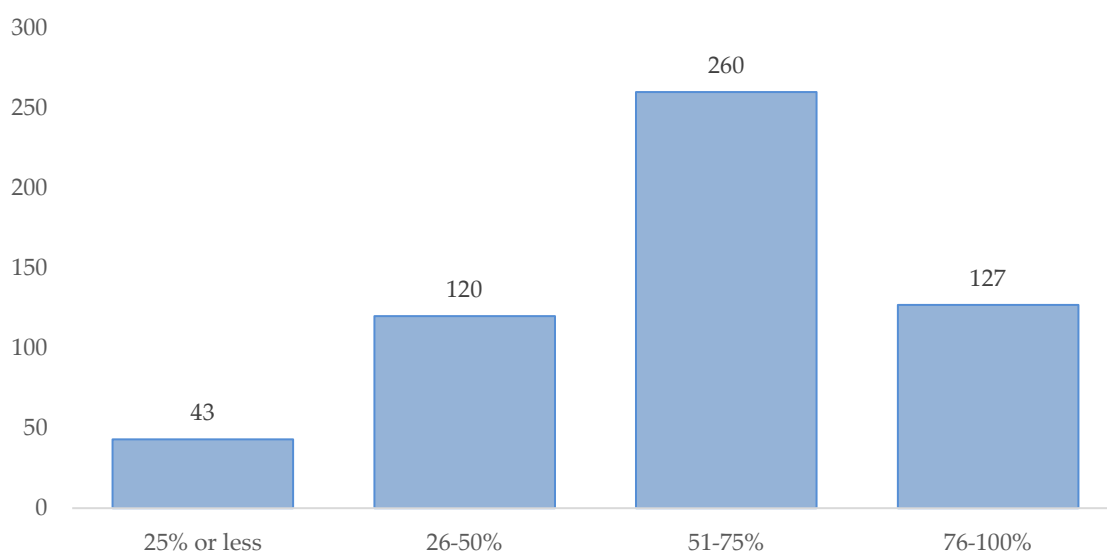
It's only as effective as the home environment for the student. If the student doesn't have the space, technology, and parental support, they will disengage.

Students who were able to engage during lockdown did well. A lot of our students had to work to support their families so we very rarely heard from them and if we did, they were working between the hours of 11pm and 3am. Those students who were disengaged before the lockdown went missing and dropped off the face of the earth.

The survey asked two questions specifically about student achievement under Covid. Had the survey team known how crucial this issue had become, we probably would have asked further questions.

The first achievement question asked: "Thinking about the school year 2021, what is your best estimate of the amount of curriculum material your students covered, where 100% was the amount that would have been covered pre-Covid. Please include curriculum material covered via Education TV and other remote forms in your estimate".

Figure 28. Estimate of curriculum work completed in 2021 as proportion of pre-Covid completion. n= 553



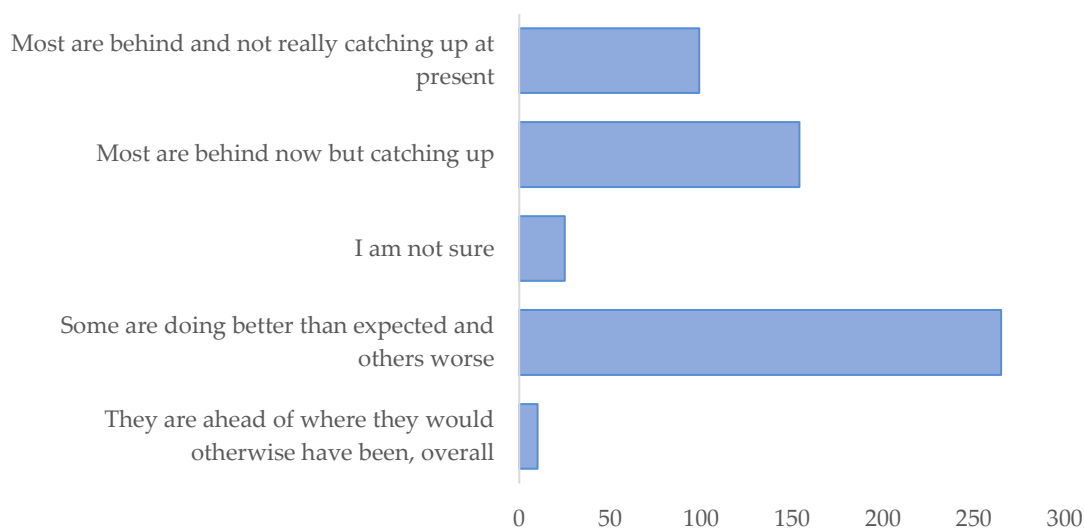
The burden of getting students to complete curriculum work fell on teachers, leading to a significant increase in their workloads, often for little improvement in outcomes:

OMG it was a massive increase in workload - uncompensated, it required extreme levels of resource building, it required extreme levels of student support, much longer hours, negative to wellbeing, negative for robust student educational outcomes, poor levels of work set completed, students needed constant monitoring and phone calls to get them actually working. 20% of the best most able students did only some of the work, others did little to no work despite staff interventions and calls.

Online learning was not good for the students. They performed well below and are now struggling with motivation to be engaged in learning

The second achievement question asked how students were performing currently.

Figure 29. How are your students performing now in the curriculum? n=553



In comments, teachers provided more information on the issues around current student performance. Many focused on the disruptive effects of 2020 and 2021, and how these have fed into lower performance in 2022:

The average student did not do as well and I found that when I came back to class about half of them had learned nothing and I had to go back to the start of the topic and re-teach it (and provide extra work for those that did learn from home).

I feel that under the circumstances the motu functioned well, however the education outcomes for my primary students has (for some) been less than desirable. I feel it will take several years for students to once again achieve at pre-covid levels.

Then as a PCT in 2022, the disruption that covid and flu have played on student learning across the board has been significant. I have done my best to provide material online so ākonga in isolation can keep up, but I found very few were willing to do any curriculum related mahi at home, and I don't blame them.

So many kids are struggling to catch up and the distance learning uncertainty has fed into the truancy rates in my opinion

Learners are not where they should be and it is still a fight to receive support and help. Engaging students back into learning has been a major for our kura and as a classroom teacher it has been added to my job.

All students I teach are achieving below where I would expect them to. None of my senior students are attempting all three external standards, and none are attempting Scholarship, after three years of disadvantaged learning and stress.

A key contributor to low student achievement is student attendance. Over the period of the pandemic, there have been many barriers to the continuance of teaching and learning, many of which have led to reduced student engagement. In 2022, this has culminated in an habitually low attendance rate in schools overall (which has been developing for some years) of a third to a half of students attending school regularly.

2022 was the hardest year of the pandemic for me and my students. We managed to cover less of the curriculum than in the previous covid years. Attendance was very erratic. My subject depends largely on group work and unpredictable attendance made this very challenging. Whereas during lockdowns we were all at home and online "together", this year, although we made much more use of online platforms, there was no time for direct contact with individual students isolating at home other than emails. Many students lost several weeks of school without the benefit of contact via zoom.

Some teachers noted their despair at the continued effects of low attendance on students' learning, teachers' planning and the curriculum. The following four comments encapsulate the range of factors affecting learning: attendance, attitudes, student behaviour and so on:

Covid has become the excuse. It has enabled students to truant as despite the extra money nothing is being done to address truancy. The level of educational expectation has been lowered and learning credits are certainly not justified. Students now expect to be passed without meeting basic standards of education for 2022

Only 30% of students across year levels engaged with online learning during 2020 and 2021 lockdowns. Students off school due to family or themselves having COVID did not engage at all. Many parents seem quite happy to allow their children days off school for no reason or for holidays sitting term time. It is frustrating when on any given day you only have half of a class. When now at the end of term 4 students still miss 50% of their classes.

Our community really struggled. They don't come on a regular basis - our trancies are astronomical, and the kids just don't care. They have no motivation or drive to be at school. Behaviour and pastoral care concerns have skyrocketed! Along with 'issues' at home. It all makes it really hard to do our jobs and nearly impossible to enjoy our jobs a large majority of the time. I'm a BT and just cannot believe the crap teachers are having to deal with at the moment!!! Especially when a beginning teacher salary is pitiful!!!

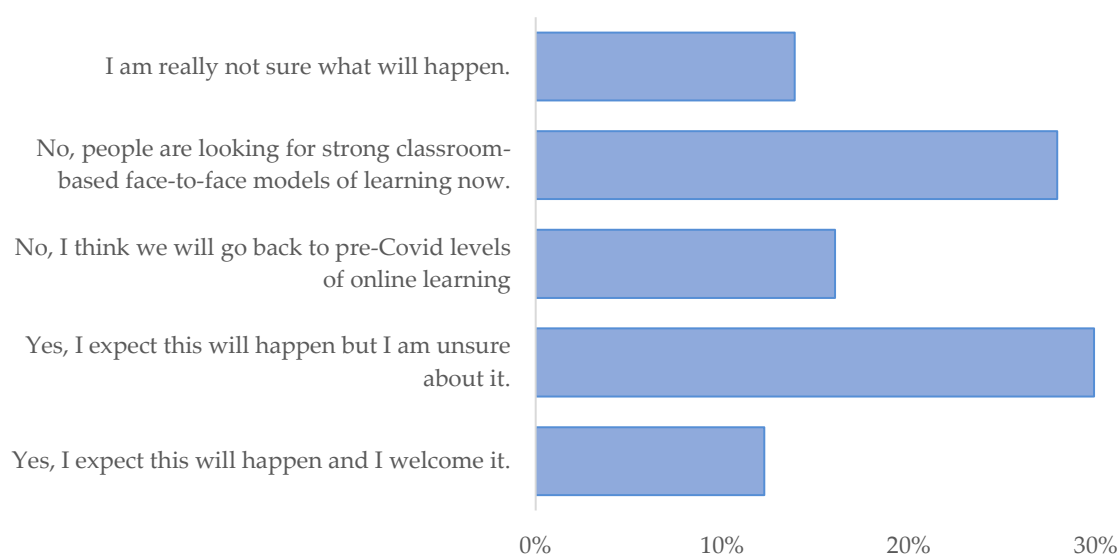
Besides the lack of focus, there was an average of 35-50% of students attending each lesson.

A number noted their hope for an education ‘reset’ in 2023, where high levels of school attendance would be achieved.

Face to face or online learning?

Participants in this study engaged vigorously with the question of whether online learning will be further entrenched in models of school learning in the future. In the open-ended responses, this question was addressed more than any other. The survey question, and responses, relating to this topic are outlined in Figure 30 below.

Figure 30. Some have suggested that online learning will become much more common as a result of experiences under Covid. What are your views? Please tick one best response. n=555



There was a strong overall defence of classroom learning by many participants, in terms of the conduct of education as an important social, 'human' activity:

The lesson I have come away with is that it is vitally important to have human to human contact in a classroom. My students are not adults so do not have a mature attitude to learning on the whole...

I think that teachers, schools and MoE did a good job providing online learning. However, this should be seen as a last resort in desperate times, not as a replacement for face-to-face learning.

Students need face to face contact with their teachers. This is the only way good teacher student relationships can be built which then facilitates better learning. It is impossible to teach practical subjects via online learning. Students need workshops/studios to work in.

All of the parents I have now report back that the children are much happier in the school environment. All the key competencies cannot be met online - relating to people, participating and contributing. The quality of education over the internet is only half of what you can experience in the classroom - teaching is a human job - not one for computers and machines.

Human interaction is very important. Students need to be in class as it is not only good for learning but also they make friends, they learn from each other, good for building relationships, good for discussions. Online learning increased depression and to avoid that we need to focus on more group work and less devices.

Online learning can be useful to well-motivated and literate students. It is not as effective as face-to-face learning. For maths, assessing online is more difficult than pen and paper.

Many responses also focused on the importance of the classroom in facilitating learning.

Devices have their place in learning digital literacy which students will need for the workplace as well as specific online education tools. However they do not replace face to face interaction and your basic skills of being able to hold a pen and write a sentence with no assistance whatsoever. I think what covid showed us was that students learn better when there is classic classroom learning going on and not 100% time on devices.

I've been surprised at how many students struggle with using technology and do not engage with it. Certainly in my subject nothing can replace physically working together in the same space - those who are able to build good collaborative relationships are the ones who excel.

Student engagement and motivation when not in front of a teacher was very erratic at best. Students who normally do the bare minimum switched off completely.

Many participants also discussed the social and learning inequities that developed under Covid. A general view is that well-motivated, high achieving students can perform well in a distance learning environment:

Distance learning can be okay for students with very low deprivation and high motivation but not as good as in-person learning. Learning doesn't just slow down but reverses with distance learning for students with high deprivation and low motivation, and all students miss out on socialisation.

However, by far the majority of students face a range of difficulties in online or distance education, which tend to exacerbate learning inequalities between groups:

When the restriction of coming to school was removed, most learning stopped - except on the part of the most motivated students. Face-to-face learning reduces the tendency for the tail of the bell curve to drop away.

Most of high school students are not mature enough to cope with online learning. This would even widen the gap between the less bright students and the already existing gap between the mainstream pakeha dominated and PI and Maori students. Only face-to-face teaching will solve the problem.

There are definitely some advantages to online learning in terms of convenience, but those not supported at home (either due to education level of parents, or parents out at work, or those who believe that education is solely the school's job) are massively disadvantaged. Digital devices at school can be really helpful, but can't replace the face to face bouncing of ideas and truly responsive teaching.

A common view also is that classroom learning is not only superior for most students and more effective, but also more efficient:

Upon returning to school post lockdown, an idea was put out through SLT that the number of lessons could be reduced for senior classes as teachers could teach them remotely! In my opinion, there appears to be a misunderstanding around how much time it takes to prepare a lesson online, deliver it, mark the work and do follow up with each student. Face to face in the classroom is much quicker and more efficient.

We managed this quite well; however it is definitely not a long term solution. Students started well, but without the constant presence of a physical teacher, most started to peter out, even the good ones. It is nowhere near as good as being in the classroom with students, monitoring what they are actually doing right in front of you. It does not compare with the immediacy of teacher response in person, and quick clarification of questions asked by students. All in all, online learning is slower, the marking is tedious, the in and out of Google docs is PAIN. Put me in the classroom any day.

Another view held by some teachers is that the isolation of online learning, as compared with the social environment of the classroom, has affected the health and wellbeing of students.

It is vital for young people to interact in a real environment. To learn to deal with real situations and to build life skills including social skills, social responsibility, resiliency to name a just few. My concern is the push from many people to increase online learning. The more students stay at home and learn online the more mental and physical health issues they have.

Distance learning is fine in theory, however, there are a number of barriers that present themselves and there is no replacement for face to face interaction with a classroom teacher. The absence of the social side of school life was detrimental to student wellbeing.

There was support for online learning as a tool, and some saw its potential to be far more effective with good training and clear implementation:

I think that online platforms should continue to be used to provide students with ready access to learning resources, however, there would need to be significant (massive!) systemic and social change to ensure equitable access and support/encourage greater student motivation before online learning could become equally effective as face-to-face learning.

In 2021 we started our journey as a Maniakalani school - I have just completed my Digital Fluency Training and I have a completely different outlook on the use of devices in the classroom - but it only works when teachers have the pedagogy and knowledge behind the learning. I now see so many ways we can help students access learning more effectively from home. I teach new entrants so they really missed the face to face but I have the skills now to create much better online learning for them. I have a classroom blog and a class site and this is working well.

Finally, teachers have concerns that, going forward, they will be expected to teach using both online and face-to-face methods side by side. They generally agree that a range of digital tools can enhance learning, but there is concern that schools are being pushed towards a dual mode model of teaching face to face and online.

Hybrid models were by far the most difficult for teachers to implement and maintain. This is the scary challenge for teachers going forward as the expectation moves into doubling workload with face-to-face learning AND creating resources for online learning and communicating with on-line students. While it is true that some students did well in an online environment, the majority of students felt less secure about their learning and were less motivated to complete work.

The overall message is that teachers want an effective system of classroom learning supported by a range of tools they can employ to improve student learning. The baseline is a classroom full of present, motivated students. Some despair that, in the latter part of 2022, the school system was far from this goal.

Impact and key findings

Our study aimed to find out from teachers what they experienced during the pandemic, how they coped with the switch to online learning and their views on current issues, as the pandemic stutters to its end-stage. What we found was very dramatic – a schooling system in significant disarray, with more than half of students failing to effectively engage, huge learning gaps, falling student achievement and significant concern about the future. Along the way, the study canvassed the issue around face-to-face versus online or remote learning, engaging with digital futures and how they see their own roles. This section focuses briefly on the main impacts of 2020-2022 on learning in schools and then briefly summarises key themes emerging from the study.

The impact on whānau

The general view of teachers was that most whānau/ families were not able to offer schoolchildren the support they needed to learn effectively while working from home. Four main reasons were given for this:

1. Parents, however well meaning, are not trained in the education of their children and were overwhelmed by the challenges of motivating learners and maintaining a schedule of education. Where the parents were trained teachers, the stress of trying to maintain their teaching role at a distance often clashed with the need to also be a teacher to their own children.

The students from poor families in my class missed out especially families headed by unemployed white single mothers they were the least likely to have computers or ipads at home.

Motivation by students and whānau to engage in learning was the biggest barrier to those learners who already are not achieving in the regular classroom. Despite many of those parents not working, they are not connected to what their children are learning and despite many attempts to connect in a variety of ways those same families are disconnected and their learners are the ones who have not made progress; despite these families having paper packs, online learning support and school-provided devices

2. Many student homes were not effectively set up for online learning. A lack of resources provided significant barriers to effective learning. There were many distractions to learning:

Without the support of whānau it was virtually impossible to engage with 8-11 years online. Despite 95% of students having access to a device and internet, their routines at home were disrupted and teachers had to compete with YouTube, TikTok, discord etc. Many students came online to have the social connection, but once given independent tasks VERY few completed these unless they had an adult in the house who was able to check in on them.

We were not well prepared but we did the best we could to provide learning for students and we managed to put together some great material for students but the success of it really depended on whānau having decent connectivity and also whānau being available to help their students.

I could see that some students appreciated the routine of online learning the way my school did it, but others had familial obligations they needed to keep up on while at home, or having to share online capable devices with other members of whānau.

3. The families with the time and resources to effectively support their children's learning generally also had the children that needed less intervention. Family resourcing is a key factor in all education modes.

Some families were incredibly motivated and organised, supporting their child(ren), at times over and above what we expected/hoped for. Feedback from some families was that the kids wanted to get onto Seesaw etc and do the activities that we provided. Other families from the get-go, and I was even told as much, that 'no, we won't be doing anything.' Reasons supplied included no device/husband needs the device/no time/no internet. We offered families the school's devices, not that many took us up on it. My concern, if this were to be for an extended period of time is that some kids would miss out on significant chunks of learning and these kids would fall behind others in their cohort. The onus under circumstances like lockdowns falls on the parents and unfortunately, to put it bluntly, some parents appear not to be concerned about the (non-)education of their children. But let it be clear, when asking these children they almost to a person also told me that they played on devices 'the whole time.' It was just not academic learning.

Equity. A lot of our kids did not have devices or internet or IMPORTANTLY an easy quiet place to learn at home. Some kids were supporting their families with working so could not engage. What was possibly the worst was that we had to do engagement reports, sending traffic light grades to homes. Imagine being a household, struggling to manage lockdowns (job loss, all the members working to stay afloat) and receiving red reports each week. It sickened me and I was strongly against it. During 2020, either the parents decided it was a long holiday (actually said this) or they found it hard to support their children due to their own educational experiences, not a lack of support.

4. The pandemic brought numerous stresses to families including employment, finances, physical health, mental wellbeing, isolation, households having to learn to operate in new ways and a wide range of social and psychological resource issues. These fell unevenly on whānau.

The learning experiences for the children at home depended, to a large extent, on parent support and guidance. Whilst children were able to complete most of the tasks independently, they did not have the self-management to complete all the tasks. Some children attended the daily zooms, but did not participate in any of the learning experiences provided. Many parents were trying to work from home, with pre-schoolers and school-aged children, all vying for attention or working

on different devices. Our school loaned many Chromebooks to families who needed them - but some parents opted to use the devices for themselves instead of giving them to the children to use.

I am fortunate as all my students had access to both a device and internet. Engagement was directly related to parental support. Stressed families struggled to cope.

The impact on teachers

There was a small number of teachers for whom the shift to online teaching and learning was almost 'business as usual', except in relation to the Covid context. But for most, the changes were sudden and dramatic. There was also a strong minority view among teachers that they were the forgotten ones during lockdown, with all the emphasis going into resourcing whānau and tamariki.

Workload issues were to the fore, with many finding that they were working longer hours during lockdown:

I found I worked more hours from home! It was certainly a learning experience for me!

Balancing mahi, whānau, keeping the house whilst trying to maintain a sense of hauora was impossible for myself and many of the families I engaged with. As a kaiako, I worked from 7am until 9pm to try and keep up with all the planning, interactions with ākongā and whānau and providing beneficial feedback. My own tamariki suffered because of this.

It was exhausting during lockdown. We were told to take screen shots of every text and email to caregivers as evidence that we were working and communicating with families and add to a google doc. My google doc had 200 pages. Screenshots of all zoom sessions too. We had to link all management into our zooms so they could pop in and check up on us at anytime. Its fine to be observed and be transparent but it was about trust and management being worried about the MoE auditing us down the line to see what we were doing. We were told by management the MoE might ask us to repay our salary if they chose to audit and find we weren't working enough hours.

In addition, a number of responses noted the financial burden on teachers, who had to pay for (often upgraded) internet and computing costs, printing, calls, delivery of materials without (in general) any financial recompense.

It was a huge concern to our kura that the majority of online learning was at the personal expense of the teacher. We all used and some had to increase their payments in order to cover their Internet usage at home for online learning. No one had this cost covered and nor was it acknowledged.

Hardpacks were delivered late re past lockdown so were ineffective. We made our own packs and delivered iPads to our kids with special needs. We also had zooms, phone calls etc to support families and students.

A lot of comments noted the mental health effects of the past three years on teachers and that these have been largely unresolved:

I think that experts in teacher wellbeing should have been seconded to provide this focused support as so many teachers (like many other NZers) were floundering as they tried to be all things to all people ... as well as support their students and families of their students.

The emphasis was purely on students' welfare and their learning. Very little, if any thought, appeared to be given to the welfare of teachers. During the first lockdown, I experienced severe depression and anxiety for the first time in my life. My GP diagnosed me with severe burnout and advised me to quit my job, which is just not possible for me. I still struggle with insomnia and panic attacks when I am working (either onsite, or when I am planning and marking at home).

2022 have definitely been the most difficult year. At least in 2021 the lockdowns affected everybody. In 2022 it has been so ragged that it has been truly horrible to try and run a programme of learning and assessment. In my 40 years of teaching I do not remember a worse and more stressful year than this one. I feel deeply let down by the Ministry and NZQA both of whom failed to see what was happening properly. It is now November and I feel all used up. I cannot write anymore it is too depressing.

I know staff bullying has been on the increase and unsure if this is a result of the Covid experience.

The impact on students

The impact on students has been extensively canvassed elsewhere in this report, in relation primarily to motivation, learning needs and student achievement, but also to student health and wellbeing. Further comments by teachers discuss the impact of these issues leading into the future:

Online learning can be great IF the student is motivated and their home situations allows time and space, resources for it. The reality is most teenagers are not disciplined enough to produce work and continue learning independently. All of a sudden we were asking them to have an adult approach to learning.

The impact that distance learning had on students will last for years to come. Students are lacking skills socially, emotionally and academically than I have seen in previous years. I find that parental pressure is more intense post covid as well as parents want teachers to bring their kids up to speed and aren't understanding how much time was lost and how difficult the task is.

Truancy is through the roof, our Yr 7-8 children have lost purpose in coming to school except to socialize. On the whole our families do not access distance learning from home and children are used to picking and choosing whether to come to school, so it has lost its value. Defiance at school is high as children are usually allowed to do what they want at home and don't like the expectations of schoolwork. Domestic violence has increased with increased stress caused by isolation periods, fear of illness, loss of jobs &/or family breakdowns. Children are displaying behaviours related to traumatic experiences at

school... lack of self-regulation, toileting dependence, bullying online & in person, obesity, anxiety etc.

It has been difficult to answer some of these questions accurately as I work 90% with students with special needs. I can only use what my school, and my department required, and supported me with, and what I noticed in my students then (20/21) and now (22). Although I work at a secondary school, my students range from year 7 to 13, and mostly work at primary levels 0-2. They were almost exclusively dependent on parent support at home to get online. No support at home meant they did not turn up to their online lessons. This made it very difficult to keep any continuity going any time we were in lockdown.

Key findings

Use of devices for learning in Aotearoa

The use of devices has become increasingly common in New Zealand schools and was, for many, the only or most common connection to the curriculum during periods of lockdown. Teachers in their responses documented increasing use of devices in the classroom and some appreciation of the options that online education offers.

Nevertheless, overall teachers have many concerns about the use of devices for educational purposes. The main concern is that online devices, by their nature, act as a significant barrier to diligent learning because the online environment contains numerous compelling distractions. However, the picture is complicated. Devices release some of the pressures on classroom teachers. Motivated students learn well on devices (although less motivated students do worse overall). There is a fear that the use of individual devices (BYOD, or bring your own device, is the standard in NZ) can optimise the distracted environment for learners and only the most motivated or disciplined can overcome this:

BYOD relies on pupils having the intrinsic motivation to study - devices are more of a distraction than paper books, and hundreds of times more expensive (which, in turn, means a lack of social equity). Teaching should be about building relationships face-to-face. I predict the NZ state education system will, in time, rue the day they went down the BYOD path and it'll be the children and teachers who will pay the price.

It is hard to separate out the experiences of increased use of devices with the Covid 19 pandemic, lockdowns and the patchy return to school and school learning experienced throughout the motu. The following view is perhaps the prevailing one among participants in this study:

I have noticed a huge decrease in engagement with learning and school following the lockdowns. Screens are a significant distraction and most students do not have the capacity to manage their time online responsibly. These are skills they will need to learn but this should be through gradual use, not constant use of devices.

There is a significant belief among teachers that only face-to-face classroom experiences can begin to turn around the learning gaps that have become so evident in 2022. Some are of the view that the gaps are too large to close, and this will be considered in the conclusion.

The teachers in this study are not against the use of computers for learning. Used effectively, probably in the classroom environment, in a way that largely eliminates distractions, devices are a powerful tool for teaching and learning purposes. But the view of a number of teachers is that, for the averagely-motivated child, a course of instruction online cannot compete with the delights of social media or with the view that anything that needs to be known can be looked up on Google, and that schooling is a waste of time (to summarise a number of comments).

Remote learning

For a range of reasons discussed in this report, participants noted that lockdowns, sickness and the slow return to school has fostered a lack of motivation and interest in school education. Education levels are believed to be well behind overall and school attendance probably averaged below 50 percent for much of 2022, probably accelerating the long-term decline in compulsory attendance rates. Throughout the pandemic, the teachers in this study put huge energy into online learning in various modes to ensure that students had continuity of learning.

Engagement has been a huge struggle in terms of remote learning. One teacher summarised the prevailing view that:

I just don't think there is any substitute for being in the classroom for the majority of students. Some who can self-manage and are fairly motivated or gifted learners can manage and perform very well, but there's other things they will miss out of like the social side of school.

Another teacher explained this in terms of the constant guidance that classroom teachers are able to give, in order to foster independence:

Tauira need to be motivated to learn to engage better but need to be taught how to learn independently. Face to face teacher guidance gave tauira assurance which they didn't get on their own and made it harder to engage.

The key finding of the study in terms of remote learning has been that it fosters disengagement, falling motivation and less learning of the curriculum for all but the most motivated and high achieving students. But school does not suit everyone and one participant was clear that remote learning models can be successful for students who were bullied at school:

I think online learning is a good opportunity for ākongā as face-to-face school does not suit everyone. I have seen our psycho-social ākongā who were bullied at f2f school really excel and regain their confidence and self-esteem. Most have gained the NCEA credits they need to move on to tertiary education, apprenticeships or employment.

The main fear that teachers have is that they will essentially be placed in a position of having to provide dual class and remote courses into the future. Participants feel that teachers face a huge 'catch up' task in 2023 and that this requires a focus on face-to-face learning.

Support for teachers and teaching

The Covid years have taken their toll on teachers. Participants told numerous stories of the effort they put into continuing the education of their students, and the falling returns from that

effort. Those with children at home found significant conflict between continuing to educate classes of children and to support and look after their own children as well.

There were significant differences in the way schools handled the shift to remote learning during lockdown. Differences included the amount of class contact required, whether the 'school day' continued to be followed or whether a different regime was in place, the extent to which pastoral support overrode the need to teach the curriculum and the amount of support both teachers and students/ whānau were given.

There was little sign of national educational leadership, and local school leadership varied considerably. One teacher was told she was lucky to have a job at all, and another was told her pay could be docked if a Ministry audit found inadequate work. Many teachers reported significant stress, additional financial costs and burdensome workloads.

Around one in five participants felt that the school had 'very well resourced' teaching under lockdown conditions, and 55 percent felt it was fairly well resourced. Around a quarter of participants noted inadequate resources. Forty percent reported there was specific professional development for online learning and that it was helpful.

The major ongoing problem reported by teachers was the falling levels of engagement in learning through the Covid period. This included lack of engagement online (students turning their video and audio off during remote lessons, leaving teachers talking to blank screens), absence from group sessions, difficulties in contacting students or their whānau, set work not being completed and extremely low classroom attendance right up to the end of 2022.

Some participants stated that the problem of falling school attendance had been devolved to the classroom teacher, first during lockdown, when teachers were expected to teach all their classes and thereafter with extremely poor school attendance during 2022.

Few teachers agreed there was adequate additional support to ensure equitable learning, to assist children with diverse needs or for those in bilingual or immersion settings.

Student engagement and academic progress

There are four key themes relating to engagement and learning that emerge from this study and will be considered further in the final chapter.

The first is that, for many different reasons, student engagement with schooling fell dramatically during lockdown across the board leading to poor attendance and incomplete work.

The second is that motivated and engaged students continued to learn at high levels during lockdown and beyond, and most of those (but not all) had a history of high achievement. However, the number of motivated students dwindled during successful lockdowns and did not improve much in 2022.

Thirdly, many students in low-decile schools failed to engage during lockdown and there has been a slow return to school, fostered by poor health, reluctance by whānau to engage and probably many other factors (research should be done on this).

Finally, as a result of the above trends and others, most students are significantly behind in the school curriculum at the beginning of the 2023 year and teachers are concerned about their ability to catch up.

The amount of qualitative data generated by teachers sharing their views was enormous, and this report provides highlights only from that rich dataset. Our team of volunteers hopes to be able to provide further analyses of data later in the year.

References

- Cooke, D. (2018). *Blind faith: Deconstructing Unitec 2015-2017*. Report to the Tertiary Education Union. Wellington: TEU. <https://bit.ly/2TAbpld>
- digital.govt.nz. (Nov 2020). Tackling the digital divide during COVID-19. <https://www.digital.govt.nz/showcase/tackling-the-digital-divide-during-covid-19>
- Education Review Office. (June, 2020). *Covid-19 learning in lockdown. Ko te Tamaiti te Pūtake o te Kaupapa The Child – the Heart of the Matter*. www.ero.govt.nz.
- ERO. (2021). *Learning in a Covid-19 world: The impact of Covid-19 on schools*. <https://ero.govt.nz/our-research/learning-in-a-covid-19-world-the-impact-of-covid-19-on-schools>
- Jones, N. (23 Aug, 2016). Students to learn online from home instead of at school under major education reform. *NZ Herald*. <https://www.nzherald.co.nz/nz/students-to-learn-online-from-home-instead-of-at-school-under-major-education-reform/AHGP36GEZ7KYYWBKEXGZLIBQHQ/>
- Karlsson, L. (2022). Computers in education: the association between computer use and test scores in primary school. *Education Inquiry*, 13(1), 56-85.
DOI: 10.1080/20004508.2020.1831288
<https://doi.org/10.1080/20004508.2020.1831288>
- Mitchell, L., Hodgen, E., Meagher-Lundberg, P., & Wells, C. (2020). Impact of Covid-19 on the early childhood education sector in Aotearoa New Zealand: Challenges and opportunities. Initial findings from a survey of managers. Wilf Malcolm Institute of Educational Research.
- OECD. (2020). School education during Covid-19: Were teachers and students ready? New Zealand. <https://www.oecd.org/education/New-Zealand-coronavirus-education-country-note.pdf>
- OECD. (2022). *How Learning Continued during the COVID-19 Pandemic: Global Lessons from Initiatives to Support Learners and Teachers*. <https://www.oecd.org/education/how-learning-continued-during-the-covid-19-pandemic-bbeca162-en.htm>
(2022)
- Parata, H. (23 Aug, 2016). Biggest update to education in 27 years. Media Release, <https://www.beehive.govt.nz/release/biggest-update-education-27-years>
- Sedgwick, C. (2021). *The continuing and future impact of Covid-19 on tertiary education staff: Covid-19 Survey Part Three*. Wellington: TEU. https://assets-global.website-files.com/5c6dcbdefb133660ed1ad071/61563881f5e450435c7cafd6_Tertiary_lives_colour_30_09_2021.pdf