



Resilience Planning for Schools: in an age of COVID-19

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December, 2021

Future
Makers

Resilience Planning for Schools, Published December 2021

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Published by FutureMakers Ltd.

www.futuremakers.nz

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How to reference this report

Wenmoth, D. (2021). *Resilience Planning for Schools*. Wellington, FutureMakers Ltd.

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Disclaimer: *the content of this paper represents my own thinking and does not reflect the position of any group or agency that I work with currently or in the past. This is an initial version of these ideas which may be expanded upon in future based on feedback and demand. Any queries please feel free to contact me at derek@futuremakers.nz*

Mission Impossible

Challenge

How prepared will you and your school or kura be in 2022 if any of the following were to occur...

- Up to 30 per cent of your students are self-isolating at any given time because of exposure to COVID-19?
- Up to a quarter of your staff are unable to be at school in-person because they are self-isolating?
- Staff and students are coming and going from school at irregular and unpredictable times due to the self-isolation requirements?
- Some students may be away for extended periods (more than a term) due them being a part of a large family and so having to remain isolated until the last person in the family group has recovered?

Vision

“A resilient system”

Schools and kura able to remain fully functioning in the face of challenges relating to the presence of COVID-19 in the community.

Mission

Using a hybrid approach to enable participation of staff and students in the teaching and learning process regardless of location, and the ability for them to move seamlessly between in-person and remote modes as required.

Values

Equity – every learner and every staff member will be able to continue to teach and learn, regardless of where they are located. This includes ensuring they have access to the tools for learning remotely, and the skills required to do that effectively.

Inclusion – all learners’ needs will be addressed by applying the principles of Universal Design for Learning, and ensuring that the design of programmes of learning recognise learners’ cultural, ethnic and special learning needs.

Responsive – programmes of learning will be responsive to the needs and circumstances of learners, with sufficient flexibility in the design to be able to adapt to meet changes in circumstances or need.

If this has piqued your interest then please read on...

Introduction

This paper has been written out of a sense of urgency related to the possible futures that schools in New Zealand (and elsewhere) may face in 2022 and beyond as we learn to live with the presence of COVID-19 in our communities.

The intention is to provide a framework for educational leaders to consider what these futures might be, and as a result, to be in a better position to plan and be prepared for their eventuality.

This is not about trying to promote a particular view of what might happen, or to engage in any form of scare-mongering. It is merely an attempt to encourage those with responsibilities for providing leadership in our education sector to engage more deeply and meaningfully with the current situation and assist them to prepare for a more resilient approach to the future for their schools, staff and students.

Returning to normal is not an option

The global COVID-19 pandemic has caused disruption in almost every part of our society – including education. The lockdowns in 2020 and 2021 forced changes in the way the Ministry of Education, schools and educators have worked to ensure a continuity of learning for learners during the periods that schools were closed.

For the majority of people, there is now an expectation that, under the conditions of the new ‘traffic light’ system, schools will be able to return to ‘normal’ with students returning to attend in-person and classes being conducted as they were before. While there is some acknowledgement of the fact that there will be some students who cannot return to school, the major focus of activity appears to be on what will happen within the physical location and structure of schools.

While the desire to return to what is familiar and known is understandable from a human perspective, school leaders must be thinking more strategically about the scenarios that they will face in the year ahead, and how they might prepare for the ongoing disruptions to ‘normal’ that they and their communities are likely to face.

What's different about 2022?

During 2020 and 2021 schools in New Zealand were closed for specific periods of time under the government lockdown requirements. Otherwise, they remained open, albeit with some modifications in terms of physical distancing and mask wearing as required in each context. Essentially, it was a binary choice – schools were either open or closed.

During the period(s) of school closure attention was directed to various forms of emergency remote learning, drawing from a range of distance and online learning pedagogies to maintain the connection with learners for the period they could not attend school in-person.

In 2022 the circumstances will change again. Here's some of what we need to consider...

- With the vaccination rate reaching 90% across a significant part of NZ, the country is moving from an elimination strategy to a containment and mitigation strategy.
- From December 3rd 2021 we will see increased movement of people through NZ resulting in an inevitable spread of COVID cases through the country, and the likelihood of increased numbers of travellers returning to or visiting NZ from overseas.
- With increased movement comes the increased risk of transmission, with the Ministry of Health predicting a rise in the number of cases of COVID across NZ after 3 December. The mitigation here is that for those who are vaccinated the severity of the virus will be reduced.
- Everyone who tests positive for COVID-19 and everyone who lives with them and their close contacts will need to isolate from the community to help stop the spread of the virus. They can either do this at home or in a managed isolation facility.¹
- Positive cases will need to isolate for at least 10 days if fully vaccinated, or for at least 14 days if unvaccinated, including at least 72 hours symptom free.
- Others in the household will need to remain at home while the positive case and anyone else in the household who tests positive are isolating.
- Once the last case has been released from isolation, the remaining members of the household will have to isolate for a further 10 days. This means they will need to isolate for longer than the original positive case.
- Further conditions apply to those who are close contacts of the positive case – these are available on the Ministry of Health website.¹

¹ <https://www.health.govt.nz/our-work/diseases-and-conditions/covid-19-novel-coronavirus/covid-19-health-advice-public/covid-19-advice-cases>

What this means for schools in NZ

In 2022 schools are expected to be open again for in-person instruction. While the opportunity to have students and staff interact again in-person is welcomed by most principals, teachers, students and parents/whānau, the implications for schools of what is happening in the wider context of NZ will most certainly impact their ability to operate as business as usual. This includes consideration of the following:

- Throughout 2022 there is a very high likelihood that there will be positive cases of COVID-19 in almost every school community in NZ.
- This will result in staff and students being unable to attend school in-person for periods of time due to them being (a) a positive case, (b) a family member of a positive case, or (c) a close contact of a positive case.
- A repeat of nationally or regionally enforced lockdowns causing schools to be closed completely is unlikely under the new traffic light system, however, some schools may have to close for periods of time where there are significant numbers cases identified among those attending (students and staff).

How have schools responded globally?

Consensus is still forming about the impact of school closures and re-openings on community transmission of COVID-19. There is considerable concern about the indirect effect of school closures on students and parents. Observations made of countries where schools were re-opened with COVID-19 present in their communities include:

- Most models of school re-opening involve reductions of class size, increasing physical distance between students, and keeping students in defined groups with limited interaction between groups to reduce the potential for wide-scale transmission within schools.
- Most countries that re-opened schools instituted some degree of staggering the start, stop, and break times within the school. A number of countries used alternate shifts (morning, afternoon) or alternate days, while a smaller number of countries have maintained relatively normal school schedules.
- A number of countries re-opened schools only for younger or older students in order to accommodate the increase in resources (classroom space, teachers, etc.) required for smaller class sizes. More countries re-opened only for younger students than re-opened only for older students.
- A number of US states introduced dual pathways for students – either face to face or remote learning. Teaching staff opted for the mode of delivery they wished, and students then opted into the stream they preferred. Once selected students had to commit to that stream for a period of time (some up to a year).
- Face masks are required for students and/or staff in schools in a number of countries, with variability of the lower age limit for face mask requirements. However, some countries are not using facemasks as a part of their re-opening model.
- Systematic school-based testing for COVID-19 virus or antibodies is being done on a small scale in a limited number of settings, but this approach is not widely implemented at this time.

What possible scenarios may schools face in 2022?

Trying to imagine and plan for what is needed for schools in 2022 and beyond is challenging, given the diversity of schools there is, and the fact that for each there will be a different set of circumstances, possibilities and ways of coping.

Scenario planning can be a useful way of stretching the imagination to help understand the possible futures we may face. Key to this is thinking about the things that are likely to be the biggest influence or cause the most change. While there are always a number of these variables to consider, it seems likely that in the coming year two things are likely to impact the way schools plan for what they do:

- The number of **students** unable to attend school through having to self-isolate as a result of being exposed to or contracting COVID-19
- The number of **staff** unable to attend school through having to self-isolate as a result of being exposed to or contracting COVID-19

Arguably this distinction is rather simplistic, yet these two variables are consistently referenced in the reports and literature relating to the experience of schools and systems during the past two years under COVID.

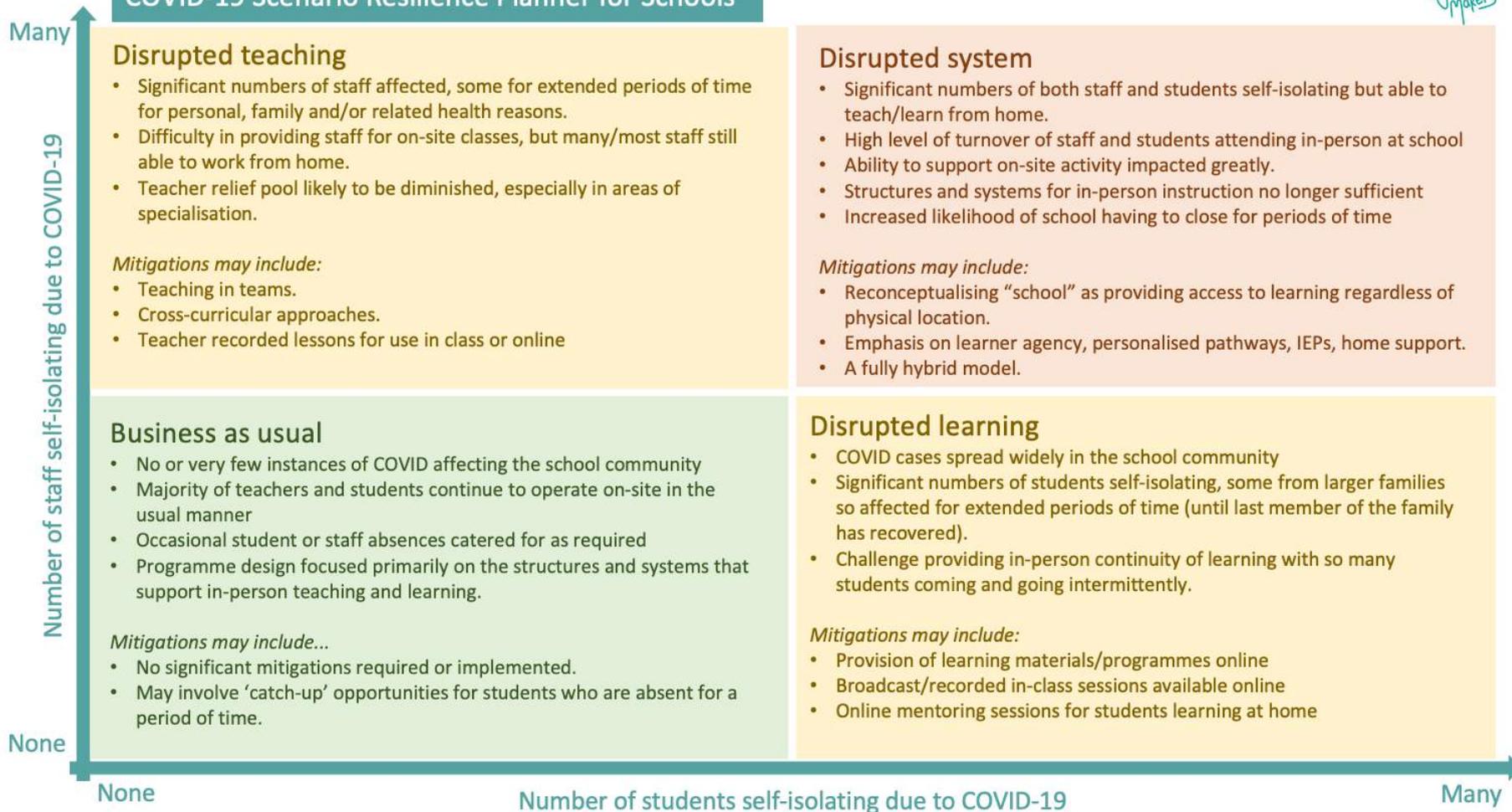
When students are unable to attend school concerns grow about their continuity of learning and the prospect of them 'falling behind' in terms of their peers and their own learning pathways.

When staff are unable to work at school it becomes increasingly difficult to deliver programmes in the traditional manner, particularly if relievers are in short supply and students face the prospect of time in school with no teacher present.

The scenarios illustrated on the following page highlight how these variables intersect and the things that need to be considered and how they might be addressed.

Each scenario is then unpacked further in the pages that follow.

COVID-19 Scenario Resilience Planner for Schools



The scenarios in more detail...

1. Business as usual

This is the scenario that most schools in New Zealand appear to be planning for right now. While many schools have been operating this way for many months, schools in the Auckland region have only just been able to open their doors again in the past week or so. The prospect of having students back in-person with classes and the multitude of other school-based activities (e.g. cultural and sporting activities) being able to return to normal has great appeal.

This scenario is premised on there being minimal disruption due to students and/or staff being unable to attend in-person, or, if so, that the numbers of people involved will be small and the time away able to be catered for using normal processes.

While some new measures may need to be considered, including...

- Mandatory vaccination checks
- Mask wearing for staff and students
- Restrictions on who is able to visit on-site
- Availability of rapid antigen testing
- etc.

... the plan for most schools in this scenario will be to return to their normal way of operating with students attending face to face classroom lessons with teachers. The existing structures and processes within which a school operates (timetables, staffing, curriculum, assessment etc.) will determine the design and implementation of teaching and learning programmes.

The arguments that students are better supported when attending in-person, that they can learn better when directly supervised by a teacher, that the benefits of social interaction in school impact positively on their development... and so on, are all valid to some degree or another, and underpin a strong case for the return to on-site learning.

But what happens when attending in person isn't the option for everyone in the community? That's where the other scenarios can be helpful to work through options and opportunities...

2. Disrupted teaching

In this scenario consideration needs to be given to how a school may continue to operate effectively in the event that a number of staff are unable to attend in-person. This may include those who are required to self-isolate as a result of exposure to someone who has been identified as COVID positive, as well as those who are infected themselves and are recuperating at home or in hospital. While those in the first group are likely to be able to continue to teach remotely, those in the second may be too ill and unlikely to be able to do this.

In normal circumstances when a staff member is away a school will engage the services of a reliever. This practice will continue, however, with the numbers of staff that may be affected in some areas the current lack of reliever supply in many areas will be exacerbated. In addition, relievers will also be potentially affected by exposure to COVID, thus placing further constraints on being able to rely on their availability.

Rather than simply cancel classes, resulting in students being left to their own devices in the school setting or being required to stay home, there are a number of things that could be considered to mitigate the impact of a shortage of staffing on student learning. These include...

2.1 Teaching in teams

Teaching has often regarded as a solitary occupation, with one teacher responsible for one class in one classroom space. Teachers have worked together for years in syndicate or departments to plan together,

and with the advent of open learning spaces and an emphasis on collaborative approaches to teaching, the benefits of working as part of a team are becoming more widely recognised.

Ensuring that all teachers work as a part of a team then can be an effective strategy when faced with the prospect of staff absences for a period of time as within the team there will be a shared awareness of and responsibility for the planning and implementation of programmes of learning. Thus, when one teacher is absent, the others in the team will be capable of ensuring continuity of learning for the students.

2.2 Cross-curricular approaches

Cross-curricular planning and implementation requires a different level of commitment among teams of teachers.

At a simple level this may involve an alignment of planning across just a couple of curriculum areas – for example, an art specialist working with the English specialist to ensure students develop appropriate information processing skills when researching an art project, and that they might then use the art they have produced as the focus for some poetry writing.

At a more sophisticated level, cross-curricular approaches are implicit in thematic projects, where the investigation of a topic and design of a solution will necessarily involve drawing from different disciplines of knowledge and skill.

The potential benefit of cross-curricular approaches when considering a resilience plan for schools is that it provides yet another way of breaking down the rigid reliance on a specific teacher working with a class. Instead, the domain expertise of the teacher is embedded in the design of the learning programme/task, but if that particular teacher is away the mentoring, support, facilitation may be offered by others in the team.

2.3 Teacher recorded contributions for use in class or online

Recording the contributions from specialist teachers that can be shared online is an effective way of ensuring the contribution of that teacher is valued, and the particular domain knowledge is shared.

In addition, recorded contributions provide students with the opportunity to ‘rewind’ this learning by being able to view the recording as many times as they want in order to fully understand what is being said – something that doesn’t happen in a regular classroom setting when the teacher is talking directly to the student group.

If considered carefully, some recorded elements may be used in multiple contexts. For example, a video made of how to structure the introduction of an essay could be referenced in multiple contexts, as could a video on how to represent data in a bar graph for example.

In addition to videos made for sharing specific curriculum knowledge etc., video is also an effective way of communicating things such as course expectations and outlines of assessment tasks etc. Again, the benefit is that these can be referenced by students at any time to refresh their understandings, so that they aren’t totally reliant on what they remembered from the one time the teacher shared it with the class.

Last point here – videos such as those outlined above are useful not only for students learning remotely. Making videos like this available on a class site is equally useful for students learning in-person, enabling them to review ideas and concepts after the teacher has introduced them.

3. Disrupted learning

In this scenario consideration needs to be given to how learning programmes may continue to operate effectively due to the number of students that are unable to attend in-person. As COVID spreads more widely across the country it is likely that a number of schools will experience significant numbers of students self-isolating as a result of being exposed to the virus or being identified as having it themselves.

Some students from larger families are likely to be isolating for extended periods of time - until last member of the family has recovered.

The challenge for schools in this scenario will be on providing continuity of learning with the intermittent attendance of students going in and out of self-isolation. Because of this it won't simply be possible to carry on with 'business as usual' and expect those who have been away to 'catch up' on their return. The numbers involved may well make this unviable, plus the disruption of students coming and going at various times will make it extremely difficult to focus solely on what is happening on-site.

Some specific things to consider here include:

3.1 Provision of learning materials/programmes online

The provision of learning materials and programmes online became the staple of schools during the previous lockdown periods. For some schools already familiar with and using platforms such as MS Teams or Google Classroom for example, this required just a small adjustment to the ways these were already being used to share and distribute learning content. For other schools it required a more significant 'jump', with teachers and students using some of these environments for the first time.

With the benefit of that experience now behind us, it is important to take stock of what worked and what didn't and the reasons for this, together with an overview of the various platforms and technologies that are available to support online learning.

There is little doubt that the consistent use of a common platform within a school community to share information about learning programmes and learning content has proven to be a great asset – both for remote and in-person learning contexts. Having one place to go to find what is required is key.

Not all experiences during lockdown were positive – and much of this may be put down to the fact that many teachers had little or no experience with what is required to design powerful online learning. Often the online platforms were used simply as places to upload content for students to access – with no evidence of 'teacher voice' in the exchange. This highlights the need for targeted teacher professional development opportunities to be a part of school planning here.

3.2 Broadcast/recorded in-class sessions available online

Students today are using educational videos as a tool for learning everything: from basic skills - like changing a tyre - to the latest dance craze². Educational video sites are expanding at a growing rate – including on YouTube or sites such as the Khan Academy³ – proving both the appeal and effectiveness of this medium for learners.

While schools may not have the budget or resources to produce video material with the high production cost of much of this commercially available material, the availability of smart phones and basic editing software makes it relatively straightforward for videos of acceptable quality for online learning purposes. Creating short videos that introduce a topic or theme, or explain a specific concept that can then be distributed via an online learning environment helps many students engage with what they need to know more effectively than simply sharing things in text.

Another way to create and share video material is to make use of streaming services that are now becoming far more popular and available. Many schools already make use of services such as Facebook Live⁴ or YouTube Live⁵, or others such as Panopto⁶ which is free for the basic version but which has some really useful advanced features for the subscription versions. Whether these are used to capture a live lesson, or for sharing events such as school assemblies, streaming video can be used very effectively for engaging students who are unable to attend on-site lessons.

² <https://www.nextthoughtstudios.com/video-production-blog/2017/1/31/why-videos-are-important-in-education>

³ <https://www.khanacademy.org/>

⁴ <https://www.facebook.com/formedia/solutions/facebook-live>

⁵ <https://www.youtube.com/howyoutubeworks/product-features/live/#youtube-live>

⁶ <https://www.panopto.com/panopto-for-education/>

3.3 Online mentoring sessions for students learning at home

The ultimate in personalising learning is when students can participate in 1-1 or small group mentoring sessions that are focused specifically on areas of need. Many teachers already create space for engaging with individual students in the context of their regular classrooms, with research showing that this sort of more intimate feedback and support contributes significantly to student learning outcomes. The same is true online, with such sessions possible in both synchronous or asynchronous formats.

An advantage of connecting synchronously online (using Zoom, Teams etc.) is that the exchange can be recorded (by mutual agreement) to be reviewed by the learner later as a way of reinforcing the advice and guidance that is provided. When connecting asynchronously (e.g. online forums, chat or email) the record of the exchange is also available for later review and reflection.

Using online tools and environments for individualised mentoring support provides further advantages, including being able to book or schedule times to suit and the ability to share files and links as a part of the support process.

For some students it may also be appropriate to involve the parents/whānau members who can then be more informed when it comes to providing the immediate support required in the home context.

4. Disrupted system

In this scenario we must consider the dual impact of having significant numbers of both teachers **and** learners being unable to attend school in-person. In the most extreme cases whole schools may be forced to close due to the numbers of COVID-positive staff and/or students who have attended – as has already happened in some places in New Zealand, even before the full impact of the spread has been felt.

A school's ability to support on-site activity will be impacted greatly as a result of the significant numbers of both staff and students self-isolating but able to teach/learn from home and the high level of turnover of staff and students attending in-person at school.

For example, current health modelling suggests that in the case of larger families who have to move into self-isolation due to COVID it could be anywhere from 10-14 weeks (or more) before the last person has recovered. That is 155 – 30% of a students year at school. This may potentially impact many of our most vulnerable communities, and there are suggestions of establishing local MIQ centres in these communities so that families aren't in isolation for so long. Either way, this will require a planned response from schools as to how to cater for these students over this period of time.

Solutions in this scenario will draw on all of the mitigations described in the previous two scenarios as both learners and teachers are impacted. But the solution should involve more than simply using these strategies to mitigate the interruption to on-site teaching and learning.

A key consideration here is the fact that there is no way of being able to 'plan' for the times staff and students may be unable to attend school – and there will likely be a continuous movement in and out during the year. The challenge is to design an approach that enables staff and/or students to participate seamlessly between on-site or remote locations as their circumstances require.

The structures and systems that have been designed to principally support in-person instruction will no longer be sufficient, and it will require the reconceptualising of "school" as providing access to learning regardless of physical location.

What should be considered here are the benefits of a fully hybrid model – where in-person teaching and learning exists alongside online/remote teaching and learning.

A hybrid model of education

The term 'hybrid' learning is a relatively recent addition to the educational jargon, and refers broadly to where in-person and remote forms of teaching and learning are occurring simultaneously. Although the term and practice existed well before the time of COVID, hybrid learning is now commonly used to describe the approaches used where schools are catering for in-class and online students learning from home at the same time.

Another term often used as a synonym for hybrid learning is blended learning. This term was in vogue in New Zealand from around 2005 – 2015⁷, and was used to describe a variety of situations where online learning was used to enhance or expand classroom-based learning. Although there are lots of overlaps in how these terms are used, blended learning isn't always used to describe situations where learning is happening remotely, or if it is, then not in parallel with in-class learning.

Different models exist

Various models or approaches are used under the umbrella of hybrid learning, including:



The Flipped Classroom Model – where students are able to access their learning online from home or from school, and where students complete their independent, research based aspects of their study at home while using the time in class to participate in collaborative or group-based activity.



The Enriched Virtual Model - This is similar to the flipped classroom model, but the focus of the learning design is online in the first instance, and the in-class activity is simply one of the spaces that may be used for various parts of the programme – where appropriate or able to be accessed.



The Rotation Model – this practice has been around for some time but was used a lot during COVID to address the social distancing issues. It uses the enriched virtual approach but students are rostered on for times on-site, the rest of the time they work from home. Many businesses are currently using this approach to create more social space in the workplace.

Any of these models, or variations of them, may be useful to consider when designing for learning in times of disruption where the ability to continue in-person instruction for everyone is not an option.

As these options are considered there is another important dimension to consider when it comes to the design of the teaching and learning required. So far we have presented the options when considering the options of on-site vs. remote learning – or, learning at school vs. learning at home.

There is a second dimension that needs to be considered also, one that has implications for our pedagogical design and our ability to cater for independent vs group vs whole class teaching and learning for example. This is the continuum of experiences that vary between synchronous and asynchronous engagement.

When a teacher in a classroom is speaking to the whole class, or groups are discussing a topic or idea, the learning activity is happening in real-time, requiring participants to be present with each other at the same time. When learners head off to the library to study independently or work at their desk to complete their

⁷ <https://elearning.tki.org.nz/Leadership/School-vision/Blended-e-learning>

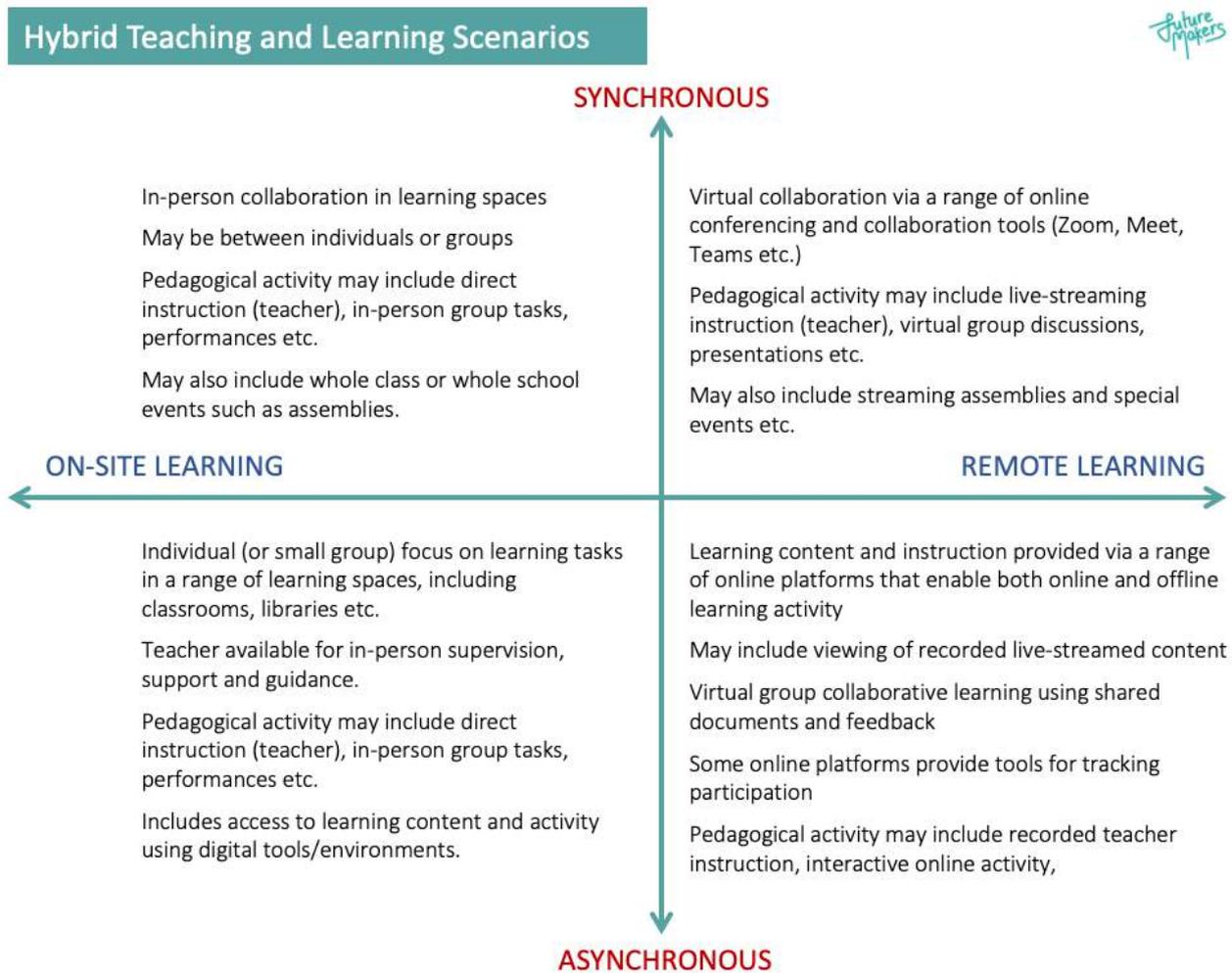
contribution to a group task, they are working asynchronously – they aren't required to be present with each other at the same time, nor in the same place.

When we introduce online technologies into the mix the same applies. There will be times where it is important that participants are present with each other at the same time (e.g. for a webinar), and other times where they may be engaged with their own learning activity, either online or offline.

The online environment offers opportunities for even more subtle, yet effective ways of working asynchronously. For example, when individuals contribute to a shared document they are working asynchronously, but are able to see the contributions that others are making either as they are making them or after they have left their contribution online.

Scenarios to consider

The range of ways educators might consider this in their learning design is illustrated in the graphic below:



On-site, remote, synchronous, and asynchronous – these are the shapes hybrid classes can assume. Together, they provide options for teachers and learners to engage in their learning, particularly when their ability to attend school physically is not possible.

The key to successfully coordinating all of these things is to adopt the principle of the Enriched Virtual Model described earlier, by focusing on the online environment as the primary point of connection and then layering in the opportunities for engagement, physical or virtual, synchronous or asynchronous, as we design the learning based on that. Continuing to think in terms of classrooms, timetables and the other structures of the traditional school setting will not allow for all of these scenarios to be given equal consideration, and will actually inhibit the flexibility we're seeking to achieve.

Challenge to change

Embracing and adjusting to hybrid learning and mixing different types of connectivity is a challenge, but only because we haven't had much experience with it until now. Most schools have relied on traditional approaches to teaching and learning, and teaching innovations in the curriculum have been slow to become fully embedded.

A common perception of the traditional approach to teaching and learning identifies teachers as the primary actor, explaining theoretical and factual knowledge, with students expected to reproduce this knowledge in exams. Despite decades of dialogue about pedagogically shifting from being 'sage on the stage' to 'guide on the side', and evidence in many classrooms and schools of attempts to make this happen, we still have a long way to go as a system to achieve truly learner-centred and learner-driven environments.

For some time now the affordances of digital technologies have been utilised to enable this shift. BYOD and flipped classroom initiatives, for example, have created new ways for learners to exercise their independence as learners and rely less on the direct instruction from teachers, creating space for teachers to engage more meaningfully with individuals or groups in the process.

Faced now with the challenge of accommodating the needs of staff and students who, for reasons beyond their control, may not be able to attend physical school, we must be prepared to fully leverage the affordances of digital technologies to 'bridge' the divide and ensure all learners can access their learning, regardless of where they are located.

Shifting practice

The new purpose for schools and educators is to determine what lessons, methods, and crafts are best suited to achieve the best learning outcomes for students, regardless of location and type of connectivity. This creates an exciting new opportunity to take a new look at some of the pedagogical shifts that have been spoken about for some time as illustrated in the table below:

Dimension	Current on-site practice	Hybrid learning
Learning environment: Where does learning predominately take place, and how do these environments support the pedagogical design and preferences of learners?	The school/classroom setting is the primary focus for learning, with some use of specialist spaces (e.g., library, computer lab). Some learning tasks are assigned to be completed at home or on student's own time.	Learning occurs in a range of settings designed to support the learning activity. Learners have increasing choice about which environment(s) they may use. This includes settings outside of school, including online.
Learning Design: what frameworks are used to inform the design of learning programmes? What are some of the implicit influences at work?	Learning design is predicated on the systems and structures of the school – hours at school, timetable, classes and teachers, subjects, assessment deadlines etc. Access to learning experience is often limited by the influence of these design decisions.	Learning design is based around the needs of individual learners, with the primary connection being online. There is greater transparency of expectations and what is required to achieve outcomes. Access to learning content and opportunities to participate in learning experiences not limited by physical location.
Curriculum: What form does the curriculum take? What framework(s) are used to specify the desired outcomes, and to guide selection of learning content and design of learning sequences? Who is involved?	<p>Emphasis on meeting externally mandated requirements, resulting in curriculum 'coverage', organised around the parameters of the school timetable.</p> <p>Emphasis on the transfer of knowledge and development of skills required for gaining employment and being successful in life.</p> <p>Some use made of local expertise - usually bringing them into the school.</p>	<p>Learners often included in the process of local curriculum design.</p> <p>Content and resources can be contextually selected, drawing on the expertise of local people and ensuring learning is authentic to the learners' context and experience.</p> <p>Emphasis on development of capabilities, preparing learners as capable, confident, self-directed learners.</p>

<p>Learning activity: What will students be doing as they engage with the learning materials and respond to direction of the teacher?</p>	<p>Learning activity determined by the timetable and resources available on-site.</p> <p>Specialist rooms and equipment provide learners with access to facilities and opportunities they may not have elsewhere.</p> <p>Collaborative and group activity enabled by physical presence.</p> <p>Opportunity for sustained, in-depth engagement limited by timetable constraints.</p>	<p>Learning activity mediated online, designed to cater for students working on-site or from home.</p> <p>Group/collaborative projects may be in-person or virtually enabled.</p> <p>Increased focus on inquiry-based and project-based learning.</p> <p>Flexible options for managing time create opportunity for sustained, in-depth engagement.</p> <p>Options made available for providing access to specialist facilities or resources for remote learners.</p>
<p>Acts of teaching: What are the pedagogical approaches used to stimulate and engage learners?</p>	<p>Teacher's primary role is instructional, taking full responsibility for decisions about what is learned and how it is to be learned. Primary pedagogical practices are didactic, with a focus on the role of the teacher as director and manager of learning.</p>	<p>A range of pedagogical approaches are employed, depending on the scope and nature of the learning activity. Teachers are active in scaffolding the learning process and increasingly act as facilitator, coach or guide. Learners more actively engaged in designing and monitoring their own learning – and in providing support for other learners.</p>
<p>Support and supervision: What systems and processes are in place to ensure the learner is supported and that they are progressing at an appropriate pace?</p>	<p>Teachers are the primary source of feedback and support for learners. Decisions about the timing and nature of support provided are generally left to the teacher based on professional observation and judgement.</p>	<p>Learners are increasingly self-managing, and can identify where support is required and seek support/feedback from the best person to guide them. Learners recognize other students' learning and support this through effective personalized feedback/forward, questioning. Parents/caregivers are recognized as partners in learning.</p>
<p>Assessment: What approach(es) are employed to demonstrate success in learning and provide evidence to support this? Where is the record of learning stored and who manages this?</p>	<p>Pursuit of learning objectives/intentions substitutes for success criteria. Teachers make all judgments as to when these are met.</p>	<p>Learners capable of constructing or co-constructing their own success criteria, with the support of peers or teacher as required. Focus is on learners' ability to succeed, with levels of performance (success) recorded in rubrics.</p>
<p>Monitoring progress: How is progress in learning supervised and monitored?</p>	<p>Teachers maintain systems for monitoring and recording progress and achievement – and for reporting on this. Often a big emphasis on 'sampling' as time limit's ability to engage deeply with each learner.</p>	<p>Self-assessment and monitoring are an embedded part of the learning process. Learners use a variety of tools and frameworks (e.g., portfolios, rubrics) to accurately identify and record their own progress and achievement. Learners are active in maintaining and curating their own record of learning.</p>

The indicators in the table above are very generalised, and provide only a window into the many aspects of change that need to be considered, but is a useful starting point for thinking about the specific areas that may be addressed by a school at the beginning of their journey to operating in a hybrid model.

A critical aspect of this change process will be professional development for all staff, and ensuring effective communications with parents and whanau – this is addressed further in the following section.

Bringing it all together

The following pages summarise the actions a school may take to have a resilience plan in place that will ensure the needs of all staff and all learners are adequately and effectively catered for in the presence of COVID-19 in communities. The actions are based on adopting a hybrid learning model as the centre-piece of how a school might operate moving forward.

	Actions...	Considerations...
	<p>Establish your “school” online</p> <p>Utilise your existing online platforms where possible to create a unified view of your school online, including links to content, community spaces, whānau connection etc.</p> <p>This should be designed as the single point of reference to all staff or students, whether on-site or remote.</p> <p>Include ways of linking to or with existing information bases such as the school website. Some of this may need to be updated or repurposed to support the new approach.</p>	<ul style="list-style-type: none"> • What tools or environments for delivering content and courses do you have already (e.g. MS teams, G-classroom, Hapara, Moodle) • What tools or environments do you use for connecting synchronously (e.g. MS teams, G-Meet, Zoom etc.)? • What other learning/curriculum tools/applications are used by staff and students (e.g. Mathletics, Education Perfect, Khan Academy etc.) • What new or different environments might we need to consider? • What about online access – do all staff and students have the required level of internet and device access to participate remotely?
	<p>Create templates</p> <p>Begin with a common template for planning to be used by all teachers, that references school and curriculum goals, and provides coherence across all areas of the school.</p> <p>Develop a template for the presentation of online courses/lessons/themes that makes it easy for teachers to upload the material aligned with their planning, and which provides a coherent and unified experience for learners.</p>	<ul style="list-style-type: none"> • What information needs to be in the planning template? • Who will see this information? Ideally the plan should be available online – or at least, specific sections of it – for everyone to see (teachers, students, whānau) • Does your school adhere to a particular pedagogical framework or model? How could this be used to help with the design of the online learning template?
	<p>Designing Learning</p> <p>Lesson/topic design should be designed with both on-site and remote learners in mind, unconstrained by the traditional structures of on-site only learning.</p> <p>Transparency is key – there must be a clear line of sight between expectations, learning activity and measures of success.</p> <p>To the extent possible, this will involve a ‘shift in ownership’ of learning, with greater emphasis given to self-managed, self-paced, self-directed forms of learning.</p>	<ul style="list-style-type: none"> • What pedagogical approach(es) are appropriate for what is being taught? Is this appropriate in a hybrid context? • How might what is done currently need to be adapted? • How agentic are our learners currently? What will they need to be able to be more self-managing? • What additional levels of support will be required? Who can be available to provide this? • What opportunities are there for cross-curricular or thematic approaches to be taken here?
	<p>Encourage participation and contribution</p> <p>Create a schedule of connections that will apply for both on-site and remote learners and advertise this well in all communications.</p> <p>Consider benefits of simultaneous connections to in-class sessions – including live streaming lessons as they are taught.</p> <p>Ensure there are adequate opportunities for engaging with parents/whānau included (forums, live chat, feedback within platforms etc.)</p>	<ul style="list-style-type: none"> • Have you considered the following in your plan for collaboration: <ul style="list-style-type: none"> ○ Synchronous and asynchronous opportunities ○ On-site and remote forms of participation • Will there need to be moderation of contributions? How will this be done? By whom? • What are your expectations of people to attend and contribute? Compulsory or voluntary? • How will participation and contribution count towards a record of learning?

	<p>Monitoring student progress and assessment</p> <p>Again, transparency is the key here. The objectives/goals/outcomes for each learning experience should be made clear at the beginning, with clear links to the method of assessment that will be used.</p> <p>Consider a rubric-based approach that empowers learners to identify where they are on a progression framework by bringing supporting evidence.</p> <p>Encourage student use of online folders to store, manage and present their work for assessment.</p> <p>Include planned time for providing asynchronous feedback to students, as well as feedback in planned presentations of completed work – both on-site and online.</p>	<ul style="list-style-type: none"> • What assessment approaches are the ‘best fit’ for what is being learned? (summative test, quiz, presentation, rubric...?) • How will you plan to provide feedback to each student throughout the learning process? How will this be recorded and conveyed to them? • What platform or environment can be used as a portfolio for student work? How secure is it? • What online tools may prove effective for monitoring student participation and progress over time?
	<p>Professional development</p> <p>Use a concern-based approach⁸ to identify the needs and concerns of staff as they are introduced to this way of working.</p> <p>Plan for the appropriate professional learning interventions to address these, including:</p> <ul style="list-style-type: none"> • Whole staff meetings • Focus groups • Use of external experts • Access to readings and research • Peer mentoring and support • Etc. <p>Implement an evidence-based professional inquiry approach to underpin all professional learning activity.</p>	<p>NOTE: to the extent that it is possible, professional learning opportunities should be made available to staff using the same hybrid methodologies as are being implemented for all students.</p> <ul style="list-style-type: none"> • How can you build an effective hybrid model of support for professional learning for staff, so that they are learning about and through the technology? • What are the specific areas that should be addressed first up in this transition? How will you identify them, and how will you ensure the needs of all staff are addressed? • How will you monitor and measure performance and progress towards the overarching goals of where you want to get to as a school?

For the purposes of this paper, the planning outline above has been kept brief to serve as an illustration only of the sorts of things that need to be considered here.

Schools seeking further support should contact the author directly – derek@futuremakers.nz

⁸ <https://sedl.org/cbam/>

What are the benefits?

The approach outlined in this paper will represent a significant change for most schools. In assessing the appetite for such a marked level of change it is always important to ask “how will this benefit us?”, and “can we afford the effort and investment required to pursue this level of change?” Perhaps the question in the current times might better be phrased as “can we afford **not** to?”. With that in mind I offer the following benefits that may be realised if the steps outlined in this paper are taken.

1

System Resilience

The first and most significant benefit is that you’ll have created a resilient school, where teachers and learners will be able to continue their work regardless of whether they are able to attend in-person or not. Features of a resilient system include...

- Continuity of operation, continuity of teaching, continuity of learning – all are achieved through taking a hybrid approach.
- No more looking for work-arounds or finding quick-fix solutions for non-attenders.
- No more being ‘caught unawares’ due to the difficulty in being able to accurately plan for what might eventuate.
- No more leaving those in isolation feeling like they’re the ‘excluded’ learners, falling behind because they can’t attend.
- Relationships with students and parents/whānau will be strengthened in authentic and ongoing ways, keeping the focus on both learning and wellbeing for all.
- Less stress on teachers and other staff as the hybrid model becomes ‘the way we do things’, enabling staff and students to switch between on-site and remote learning as required – or desired.

2

Equity & Inclusion

An essential aspect of this approach is that everyone will have the opportunity to participate, with no one being disadvantaged or left behind. Key indicators of success in this include...

- Systemic issues of equity are addressed, creating opportunities for learners to engage meaningfully with their learning despite being excluded in the past
- All learners have the access, tools and skills to be able to participate in their learning when working remotely or on-site
- Parents/whānau feel supported and empowered in their role(s) as support for their tamarki.
- All learners are able to follow a pathway that suits them and their needs, and recognises their particular strengths, culture and interests.
- Any evidence of bias is eliminated through careful learning design, including co-construction with students, parents and whanau as is possible.

3

Learner centred

A learner centred approach is central to the learning design for hybrid learning. This includes...

- Providing transparency in terms of learning goals and assessment requirements
- Flexibility in terms of start/finish and time spent on learning activities
- Emphasis on principles of UDL ensures inclusive design for participation by all
- Opportunity to customise learning activity to the learner’s context (in terms of resources, support and environment)
- Learners as participants in the learning design
- Agentic learning practices encouraged and supported – by teachers and by other students.

4

Deeper Learning

Thoughtfully and well-designed learning activity can promote deeper learning as a result of not having to conform to the structures of a bricks and mortar school environment. Evidence of this will be seen in...

- Greater emphasis on thematic/problem-based/cross-curricular activity made more possible in this context
- Ability to spend longer periods of time working contiguously on a theme/study enables greater depth of study and outcomes
- Ability to involve community expertise as partners in learning adds to authenticity and depth of learning
- Significant opportunity to emphasise development of competencies over simply assessing development in specific subject or domain areas
- Creates opportunity to explore team teaching with greater emphasis on cross-curricular outcomes (skills, knowledge competencies)

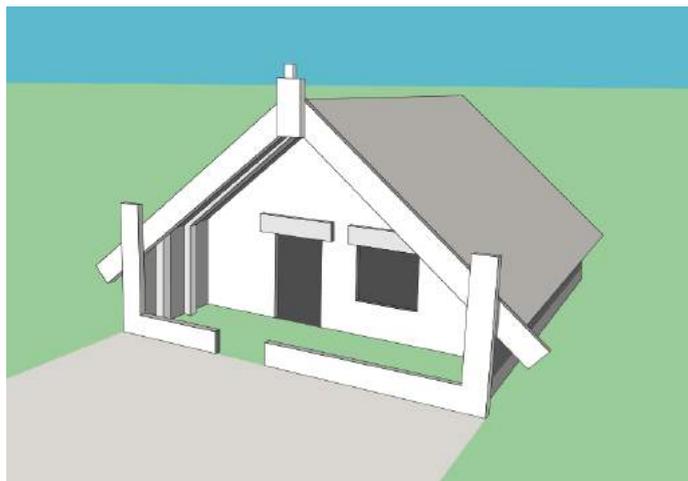
5

Sustainable Transformation

Ultimately, shifting to a hybrid model will create a platform for sustainable practices that will ultimately provide the sorts of system transformations that have been signalled for some time. Examples of where this will be evident include...

- Systemic issues of equity will be addressed, creating opportunities for learners to engage meaningfully with their learning despite being excluded in the past
- Creating opportunities for all learners to be able to access the learning they need/desire, and not be bound by timetable lines or what can be provided by the school
- Create professional pathways for teachers – able to teach in different ways and with different people. Expanding the scope of reach to beyond their local school, and ability to continue teaching in their area of expertise

Endnote: The Wharenui wasn't built in a day!



Achieving the vision introduced in this paper may feel overwhelming, but it's important to understand that the wharenui wasn't built in a day.

It starts with a clear vision, inspired leadership and a committed team of people to help build it.

The foundations and basic structure comes next – the poutokomanawa (centre posts) and Tāhuhu (ridge posts) followed by the poupou (side posts) and heke (rafters)

Only then can the roof be put on, the outer walls in place and then the various carved pieces (including the amo and teoteo) and the tukutuku lining the interior walls.

It takes time – and it takes a team.

Not all are builders, not all are carvers, and not all are tukutuku weavers. But among the group people with these skills are identified and contribute.

So it is with building a hybrid approach to school. Start with the vision for your context. Build on the strengths of what you already have, including the skills of the people in your team.

Pick out the thing that will have the biggest impact and address that first. Distribute the tasks and have people working on parts of the solution well ahead of when they are required. (The carvers and weavers are likely to be working on their contributions even as the foundations are being laid for the wharenui as it will take time for them to be completed to a standard where they can be set in place when the building is ready.)

Make sure that throughout the process you are communicating, communicating, communicating...

Communicate with your staff to ensure the vision and plan for what is to be achieved is constantly refreshed, and that they feel ownership of it.

Communicate with your students so they feel confident that their learning isn't going to be affected, and that they will be supported to participate in the ways they need/want to.

Communicate with your parents/whānau to ensure they understand what is happening and why, and that they can feel assured there will be support for them in their role in all this.

⁹ Image attribution, https://commons.wikimedia.org/wiki/File:Wharenui_scheme.svg CC BY-SA 4.0, via Wikimedia Commons