Digital learning practices during remote learning and beyond:

A case study of four schools

October 2021











This report brings together findings from four case studies. These case studies were commissioned by the Association of Independent Schools of NSW as part of a broader study to investigate teachers' effective and inclusive digital pedagogies, as well as emerging digital practices during and after the period of remote learning.

Research Team

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Digital learning practices

a case study approach

Author's Note

We write this report during Term Three 2021, as NSW again experiences a serious pandemic outbreak. Primary and secondary schools across the state are experiencing further lockdowns and striving to manage the numerous challenges accompanying remote teaching. Hence, we are mindful of the timeliness of this report, and we trust that some of key findings and recommendations can assist schools to cope with these ongoing trials. Participants in case schools have already informed us that their individual case reports, available on the Opportunities out of Remote Learning webpage, have assisted them as reflective practitioners, and our hope is that overarching 'lessons learned', as outlined in this report, might similarly contribute to other schools' management of this crisis.



The 2020 emergency remote teaching period highlighted the need for teachers to develop a broadened and inclusive set of digital pedagogies for supporting students' learning. These approaches needed to support this learning in both physical and virtual learning spaces, and cater for students' varied needs and circumstances. This included accessibility needs and connectivity limitations.

The research aimed to uncover effective digital practices to inform ongoing best-practices with technologies in Years K-12. This included the factors influencing their successful and inclusive enactment.

The research is guided by the following key question:

What digital learning practices have teachers used to support learning practices, in ways that are flexible, accessible and promote student agency and wellbeing?



What we found

Main findings

- Each school's values and mission informed whole-school decisions and strategies.
- Staff collegiality was a driving factor in each school's success.
- Teacher collaboration was a catalyst for rapid implementation of digital practices.
- The introduction of new technologies into the school was minimised.
- An agile mindset helped teachers to embrace new practices.
- Schools significantly improved their blended learning approaches.
- 'Live' video-conferenced classes were minimised.
- Self-paced student activities were emphasised.
- Digital practices focused on support of student agency, peer learning and wellbeing.



All case schools emphasised that their own unique school ethos was key to their nuanced and context-specific decision-making during remote teaching. In every case, school leaders stressed that their school's values and mission informed whole-school decisions and strategies to support teaching, learning and wellbeing during this period. Staff collegiality was evidently a driving factor in each school's successful management of the remote teaching period, and strong teacher collaboration was a catalyst for quickly developing and enacting effective new digital practices. The introduction of new technologies was minimised, and tools and platforms were carefully chosen based on user-friendliness and to reduce disruption to staff and students as they pivoted to remote teaching. Teachers at all four schools adopted an agile mindset that helped them to embrace new practices that often resulted in serendipitous outcomes informing postlockdown approaches. These typically involved improved blended learning approaches, and the use of technology to enhance student agency, peer learning and wellbeing.



These findings can be grouped into four main themes.

Blended learning approaches

Key to the blended learning approaches in most schools was a focus on more independent, student-controlled learning tasks. Synchronous or 'live' classes were reduced and there was an increased emphasis on carefully designed, self-paced learning tasks that promoted student choice, ownership and control. Teachers at all schools were conscious of the benefits of peer collaboration to support quality learning and optimise social interactions for students' wellbeing. As a result, teachers adopted digital practices to leverage learning conversations and group work.

Explicit teaching

Teachers were conscious that they had less time for explicit teaching in a remote teaching environment. Many invested much time in creating carefully tailored instructional videos that attempted to succinctly communicate key ideas and explanations to students. In this way, the remote teaching period became a time when many teachers 'stepped up' their use of new media to support explicit teaching strategies. Teachers developed new media skills to effectively create their own digital resources for this purpose. Students appreciated using learning resources made by their own teacher and interacted with these 'digital assets' at their own pace before or after 'live' video-conferenced classes.

Inclusive strategies

Schools adopted a variety of strategies to assist students who were disadvantaged due to limited access to the internet or devices. Schools collected digital resources, such as teacher-made videos or downloaded copies of textbooks, to share with students on portable USB sticks. They also created take-home 'learning packs' (one primary school called them 'learning showbags') containing self-paced learning resources and printed lesson notes. Schools also provided technical assistance, with some using pre-recorded videos from technical support staff.

Wellbeing

A fundamental commitment to students' wellbeing underpinned all decisions relating to each school's adopted digital practices during the remote teaching period. This care was often extended to students' families. Frequent check-ins were built into daily routines using a range of technology-based approaches, and where needed check-ins occurred during home delivery of learning packs. Supporting students' social interactions through online technologies helped students feel connected with their peers and school staff.





Overview of the case study schools

Four NSW independent schools were involved in this case study research. Data were collected virtually in two schools and onsite in two schools.

Participating Schools



Meriden Anglican School for Girls, Sydney

Data Collection: Virtual



Al Noori Muslim School, Sydney

Data Collection: Onsite



The Nature School, Port Macquarie

Data Collection: Onsite



St Philip's Christian College DALE and DALE Young Parents, Newcastle & Central Coast

Data Collection: Virtual

Data Collection

Term 4, 2020

Term 1, 2021

Term 2, 2021

Types of Data



Interviews



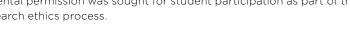
Focus Groups (Students, Teachers & Leaders)



Artefacts

Due to their unique locations and circumstances, a slightly different approach was followed at each case study school. While they varied, the schools also worked to align how they responded to the period of remote learning to their core school priorities.

* Ethics approval was obtained from UTS HREC (ETH20-5354), and parental permission was sought for student participation as part of the research ethics process.









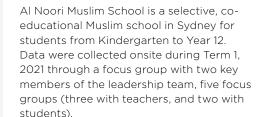
Meriden Anglican School for Girls is a nonselective, independent school for girls from Pre-Kindergarten to Year 12. The Sydney school has an enrolment of approximately 1300 students. Data were collected from this school during Term 4, 2020 through interviews with four key members of the leadership team, and five focus groups (3 with teachers and 2 with students).

Case 1 - Meriden Anglican School for Girls, Sydney

School Priorities

- Reassurance and stability
- Academic outcomes
- Student wellbeing
- Digital learning practices to promote student choice, ownership, interaction and collaboration

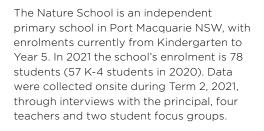
Case 2 - Al Noori Muslim School



School Priorities

- Stability and consistency
- Visible leadership
- Community wellbeing
- Academic outcomes
- Staff collaboration and collegiality
- Digital learning practices

Case 3 - The Nature School



School Priorities

- Strategic digital approach faithful to school's core values
- Digital activities as segue to practical activities emphasising authentic and social learning
- Minimalist approach to live videoconferencing

Case 4 - St Philip's Christian Christian College (SPCC) **DALE and DALE Young Parents**

St Philip's Christian College (SPCC) spans six schools and caters for students from Pre-Kindergarten to tertiary level. This case study concerned two of those schools. SPCC DALE is a Dynamic Alternative Learning Environment for students with disabilities in Years 3 - 12. This special needs school is located in Newcastle and caters for students who have a diagnosis of anxiety, depression, PTSD, or autism. SPCC DALE Young Parents is an accredited special assistance school for young parents. It has two campuses located in Newcastle and the Central Coast NSW, providing flexible learning environments for stages 4 to 6 to any young parents. There is onsite early learning and care for their babies

whilst they study. Data were collected during Term 2, 2021 through a virtual focus group with two school leaders, virtual interviews with two teachers from each school, and a student focus group from each school.

School Priorities

- Connection and wellbeing
- Caring for students and families
- Combatting isolation
- Use of range of approaches to support and communicate with students and overcome digital access challenges



Access report



Access report



For the Whole of Their Life

Access report

Findings unpacked



Key factors affecting remote teaching practices

- Acceleration of new digital solutions
- Blended learning approaches
- Technical support to drive new solutions and reduce disruption
- Staff collegiality and collaboration



Effective digital teaching practices during the remote teaching period

- Affording students' control of their learning
- Technology-supported explicit teaching
- Technology-supported peer learning



Practices to support student inclusion

- Approaches to address digital inequities
- Personalised approaches



Approaches to support teachers' wellbeing

- Staff communications explicitly targeting teachers' wellbeing
- School leadership and guidance on work-life balance and management of workload



Approaches to support students' wellbeing

- Frequent check-ins
- Online social interaction with peers was encouraged

A number of common themes emerged through the four case studies. These are discussed below, including reference to how they emerged for each participating school.



Key factors affecting remote teaching practices

Acceleration of new digital solutions

The 2020 emergency remote teaching period occurred with little time for planning or preparation. Teachers and students often had little experience of online learning and many schools had not implemented learning management systems at scale. In all four case study schools, although at very different stages of digital learning, the emergency remote teaching period was a catalyst for expedited technology integration. The technologies were carefully chosen based on their user-friendliness and to avoid minimal disruption to staff and students as they pivoted to remote teaching .

MERIDEN continued synchronous use of Microsoft Teams in the secondary and implemented SeeSaw in the junior school. Whole school made more use of school intranet.

AL NOORI teachers and students began to use Microsoft Teams extensively.

THE NATURE SCHOOL teachers learned to use Sway for learning activities and communicating multi-modally. Teachers and students learned to use Zoom.

SPCC DALE teachers accelerated their implementation of a new learning management system: Schoolbox.

Blended learning approaches

Most schools decided to avoid mimicking the structure of face-to-face teaching environments. This typically involved reducing 'live' online teaching where possible, and increasing the emphasis on more independent, self-paced learning tasks. As a result, a blend of synchronous ('live') strategies and asynchronous strategies was often adopted.

MERIDEN Senior School teachers aimed to strike a balance between keeping in contact with students and allowing a break from screen time. Asynchronous lessons in the Junior School included activities that did not require a digital device.

AL NOORI teachers utilised a 'flipped classroom' approach with students completing pre-class online activities to identify concepts that may need closer attention in 'live' classes on Teams.

THE NATURE SCHOOL

adopted a mixture of 'tech and non-tech' strategies. Technologies adopted were Sway and Zoom, accompanied by take-home packs of learning materials. They called these 'learning showbags'.

SPCC DALE teachers adopted a hybrid 'live' approach, synchronising teaching of on-campus (face-to-face) and remote (Zoom) students.



Technical support to drive new solutions and reduce disruption

Study participants in all four schools reported on positive experiences with their schools' technology support of both teachers and students. This support was perceived by all participants as a critical factor in the effective and timely support of students' learning, and also in the reduced stress levels and the general wellbeing of staff.

At **MERIDEN** although the school already had digital learning platforms, school leaders organised professional learning for teachers with unfamiliar online platforms.

IT support at **AL NOORI** ranged from addressing the hardware needs of some staff and students to assisting families with home connection issues. An IT Coordinator was onsite for teachers at school.

THE NATURE SCHOOL

chose technologies strategically for accessibility by students and ease of use by teachers, allowing staff to undertake more targeted professional learning.

SPCC DALE made the last week of Term 1 in 2020 student-free to explore online learning strategies, with IT support personnel coaching and mentoring teachers to implement lessons online.

Staff collegiality and collaboration

Staff teamwork and sharing were emphasised by leaders and teachers at all schools as a critical factor in their successful remote teaching experiences.

At **MERIDEN** effective teamwork and a sense of community made a significant difference to the quality learning outcomes of the students.

At **AL NOORI** connected and collaborative approaches were modelled and supported by school leaders to leverage a strong sense of community.

At **THE NATURE SCHOOL** teachers were encouraged to seek feedback on digital learning activities from other staff members, to foster collegiality and consistency.

SPCC DALE staff met daily over Zoom to share experiences, reduce any anxiety, and solve unexpected challenges.





Effective digital teaching practices during the remote teaching period

Affording students' control of their learning

Most schools' digital practices aimed to enhance student agency in their learning, promoting student choice, ownership and control. This approach was key to strengthening the student-led components of blended learning approaches.

At **MERIDEN** approaches were designed to leverage student autonomy and lead students to more independent work.

AL NOORI students were encouraged to share resources, engage in peer discussion, and collaborate on shared designs.

THE NATURE SCHOOL supplemented digital approaches with takehome learning kits that allowed students to control the pace of learning, and where possible, work outside.

SPCC DALE teachers built capacity for independent learning by setting daily work and having students return work samples or photographs as evidence of their learning.

Technology-supported explicit teaching

Teachers used new media to support their explicit teaching. They found this process confronting and even intimidating at first but developed new skills to enact these instructional digital approaches. This included activities such as recording and sharing their own video-based instructions and explanations.

K-12 teachers at **MERIDEN** used Seesaw to connect with the children each morning via a pre-recorded 'welcome video' and there were pre-recorded instructions and explanations for many lessons.

AL NOORI teachers engaged students in online 'live' teaching sessions through whole class discussions, exercises, and exposition work.

THE NATURE SCHOOL utilised teacher-made videos for explicit teaching, which was succinct and targeted with respect to the learning outcomes they wanted their students to achieve.

SPCC DALE teachers shared a daily blog and ensured instructions for students on their online learning pages were well-structured and student friendly.



Technology-supported peer learning

Teachers at all four schools were conscious of the benefits of peer collaboration and promoted digital practices to leverage this process to enhance learning outcomes.

Music teachers at **MERIDEN** designed lessons that allowed interactions between students in the online environment, comprising singing, playing, moving, composing, and creating.

AL NOORI teachers found that students engaged in peer discussion and resource sharing before and after lessons.

Students at **THE NATURE SCHOOL** recorded photos of experiments and later shared these with the class over Zoom to promote larger group learning conversations facilitated by the teacher.

SPCC DALE teachers found some students with special needs were often more confident participating in online peer discussions, compared to conventional face-to-face discussions in the classroom.



Practices to support student inclusion

Approaches to address digital inequities

School leaders were conscious of students who may be disadvantaged in their learning due to constrained access to the internet and/or to devices. They adopted a variety of strategies to address this problem, depending on their own school's context.

MERIDEN students downloaded copies of their textbooks beforehand and junior school students accessed pre-recorded teacher videos, and printed workbooks were made available.

At **AL NOORI**, regular recording of lessons assisted with sibling device sharing. Teachers also supported students to use multiple devices, including mobile phones.

Teachers at **THE NATURE SCHOOL** limited use of synchronous learning and prepared home learning kits for students, with additional support and instructions provided in Sway pages.

A few **SPCC DALE** Young Parents had computers at home, many were reliant on using their phones. Teachers ensured that they spoke to the students by phone each day, as well as sharing lessons via email.

Personalised approaches

Teachers used technology to adopt individualised learning approaches where possible.

Teachers at **MERIDEN** adjusted learning contracts to suit particular students. Some students with specific learning needs were able to learn on campus.

Teachers at **AL NOOR!** were concerned about students being 'left behind' and instituted individual remedial support sessions before and after school.

THE NATURE SCHOOL teachers planned for small group Zoom calls to cater for the different groups of students and to differentiate learning activities where required.

Teachers at **SPCC DALE** created individual learning plans for students and some students had the option of learning on campus.



Approaches to support teachers' wellbeing

School leaders recognised the potential for increased staff stress and anxiety emerging from the pivot to remote teaching, and from the isolation experienced during the lockdown period. They adopted a range of approaches to support their teachers' wellbeing and to minimise these risks.

Staff communications explicitly targeting teachers' wellbeing

School leaders asked their staff to meet frequently to maintain collegiality, combat isolation and check-in with each other. A sense of humour was integral to these meetings.

Teachers at **MERIDEN** used MS Teams to meet regularly with colleagues as a staff, or in smaller teams, to support each other.

At **AL NOORI**, extensive communication and visible leadership helped to create a positive staff mindset and ease anxiety.

THE NATURE SCHOOL leaders held frequent staff Zoom meetings, always beginning with a check-in to gauge how teachers were feeling.

The **SPCC DALE** staff would debrief every afternoon via Zoom and there was often a fun element to the session.



School leadership and guidance on work-life balance and management of workload

The leaders of all four schools recognised the need to manage staff workload. It was important to set boundaries for both teachers and parents regarding expectations.

MERIDEN set clear expectations and boundaries so that teachers managed their time in a reasonable way and had 'a start and a finish time' to the school day.

At **AL NOORI** there was a clear endorsement of staff managing a healthy work-life balance and not being 'available 24/7' online.

At **THE NATURE SCHOOL** the principal attempted to provide flexibility, rostering staff on and offsite depending on their personal circumstances and needs.

The **SPCC DALE** staff recommended a clear structure to their working day, delineating between school time and family time.



Approaches to support students' wellbeing

All schools already treated their students' wellbeing as a fundamental responsibility before the pandemic. However, they needed to adopt a range of new, context-specific approaches to continue their high level of student care during the remote teaching period. This care was often extended to students' families.

Frequent check-ins

At MERIDEN informal check-ins by teachers assisted in supporting student wellbeing.

Two welfare coordinators at **AL NOORI** were on the phones during the day just checking in with students, providing welfare checks if students' attendance warranted them.

Most Zoom sessions at **THE NATURE SCHOOL** combined a teaching and wellbeing purpose.

Wellbeing assistants at **SPCC DALE** co-facilitated learning with teachers. Teachers at both DALE schools checked in frequently with students and families.

Online social interaction with peers was encouraged

Supporting students' social interactions through online technologies was seen as a critical way to keep them connected and to combat isolation.

At MERIDEN peer interaction was encouraged through pastoral care groups.

At **AL NOORI** teachers encouraged students to communicate and collaborate online regarding homework and other class topics.

Small group Zoom sessions at **THE NATURE SCHOOL** were partly for students to be able to see their friends, say 'hello', and check how they were progressing.

SPCC DALE teachers encouraged students to maintain their social networks through peer interactions via Zoom and through enjoyable tasks that students could do together.



Recommendations

The common themes that emerged from the data informed the set of recommendations made in this section. Although each school had its own context-specific needs and challenges, these suggestions may be useful to inform other schools' practices during future lockdowns. Their future-focused lens can also speak to post-pandemic practices in support of ongoing quality of teaching and wellbeing in uncertain times. These recommendations are interlinked and point to schools preparing for a more flexible mix of synchronous and asynchronous digital pedagogies to promote student agency and peer learning.



Recommendation 1: More permanent adoption of blended learning approaches, with an emphasis on self-paced, self-controlled digital learning activities`

Most schools in this study tried to minimise 'live' online teaching during the remote teaching period, as they strived for a delicate balance between synchronous and asynchronous digital learning approaches. There was a preference to emphasise greater student agency in tasks that would inevitably be completed by students at their own pace at home. Many students enjoyed the extra control and choice inherent in such digital tasks. Given the wealth of literature supporting the benefits of student autonomy for quality learning (e.g. Reeve, 2009), this trend is educationally sound. However, before schools inevitably 'pivot online' over expected periods of isolated lockdowns, students need to become more familiar with these tasks. They also need to be more comfortable with the extra independence that accompanies self-directed learning, and provided opportunities to develop (and reflect on) the self-regulation skills required for successful engagement with these tasks. Teachers also need a chance to refine their own designs and implementation of student-controlled, self-paced digital learning tasks. This includes time to rehearse the nuanced facilitation skills required to mediate students' learning in these types of activities.

Illustrative examples

Some teachers in this study, particularly secondary teachers, observed increased productivity during the remote teaching period when there were fewer interruptions. When the students were at home, teachers noticed that they got more work done. Some of the schools are now considering timetable adjustments to enhance student agency. Meriden School was planning to allow their senior school students one day per fortnight to work independently at home. Some St Philip's Christian College DALE students were identified as working more effectively at home during the remote teaching, and the school is planning how to better cater for some students' special needs. DALE teachers found that some students whose attendance was quite low prior to COVID-19, were more engaged than they were previously. The teachers are now considering how they can use these observations to benefit the learning of these students as we move into a post-pandemic phase.





Blended learning approaches can help to enable more agency from students in their learning, which can be further supported through active participation and co-ownership from parents and carers. Flexible practices from school administrators who need to make timetable changes can assist in enabling more student-controlled learning.



Recommendation 2: More frequent experiences of technology-supported peer learning to prepare students for future remote teaching periods

Teachers' online discussion facilitation skills are important to support quality learning conversations in virtual spaces and on school mandated platforms. Increased confidence with these digital approaches will improve the online learning component of schools' new blended learning structures, enhancing teaching, learning and wellbeing in future lockdowns and in post-pandemic schooling.

Teachers at all schools in this study were conscious of the benefits of using technology to support quality peer learning. Their rationale was to support engagement in learning, and to optimise social interactions for students' wellbeing. Although these approaches are familiar to teachers in face-to-face school campus settings, the remote setting was new to some teachers. This included the use of video-conference facilities and cloud-based software to leverage online peer collaboration and teamwork.



Recommendation 3: More staff professional learning opportunities to improve current practices and prepare for new digital approaches

Regular professional learning is needed to effectively adopt the previous recommendations for enhanced blended approaches and use of technology to support student autonomy and peer learning.

Teachers in this study emphasised preparation, professional learning and keeping a sense of humour as a central lesson taken from their remote learning experiences. The emergency remote teaching period in 2020 was particularly difficult due to the short period of time available for preparation. Teacher participants in this study acknowledged the importance of regular professional learning opportunities for enhanced preparation and skills development. This included a focus on schoolendorsed learning management systems, and new media production needed to produce videos and other digital resources for students.

Further support

Teachers may wish to seek feedback on new or adapted digital tasks being used with their students. For teachers who would like automatically generated feedback on the pedagogical strengths and weaknesses of such tasks, including the extent of student agency and peer learning, we have new professional learning surveys available for use at https://www.ipacmobilepedagogy.com/teachers-specific-task-survey/ (Kearney, Burden & Schuck, 2020; Kearney, Burke & Schuck, 2019). Upon completion, these validated surveys yield a unique and detailed report, including an innovation score, for professional learning purposes. There are also validated student surveys eliciting students' views of their learning experiences emerging from their engagement with digital tasks. For more information on the *innovative* use of digital technologies, see Burden, Kearney, Schuck & Hall (2019), or visit http://www.deimpeu.com





Recommendation 4: Families need to be an integral part of schools' planning and preparation for future lockdowns

The schools in this study invested considerable time in providing enhanced support to families during the school lockdown period. This extra effort was initiated by school leaders in recognition of the key but unfamiliar role that many parents were adopting as facilitators of their children's learning, particularly in primary schools. The extra support was also in acknowledgment that family wellbeing was at risk due to the isolation, particularly for parents trying to balance their own work and family commitments. Therefore, in preparation for future lockdowns, short or long, it is valuable for parents and carers to be included in school discussions of teaching and learning initiatives. This includes opportunities to develop digital skills associated with the use of school-endorsed online learning platforms. Doing so can enable a more seamless pivot to future remote teaching periods. Extra communication with parents and carers, along with enhanced involvement by them, can also contribute to a more participative and enriched school community in a post pandemic world.

For more information about the four Case Studies discussed in this report as well as other publications relating to remote learning, please visit the <u>AISNSW Opportunities out of Remote Learning</u> page.

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