Being more data-informed: St Anne's Catholic Primary School, Sarina

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St Anne's Catholic Primary School Sarina is a small primary school of 180 students with an ICSEA score of 978, situated 30km south of Mackay, Queensland. The school has a leadership team of three – the principal and two assistant principals – two of whom are in the classroom part-time. In 2020, there are 8 class groups, including two Year 1 classes, and a composite Year 3/4 class. The school is a part of the Rockhampton Diocese, and thus is guided by the leadership of the Rockhampton Catholic Education Office (CEO).

The school's strengths are community relationships and involvement, pastoral care, and the faith life of the school. Over the last few years, there has been a consistent and deliberate improvement agenda, which has evolved through the development of a specific teaching and learning framework, to more targeted focus on elements such as using and embedding information technologies, and improving the consistency of teacher judgement. Following feedback from a CEO National School Improvement Tool (NSIT) review (Australian Council for Educational Research, 2020), the school realised that an area requiring improvement was teacher's use and analysis of data to inform pedagogical shifts. The decision to focus on this area was motivated by the fact that the school scored a lower result in Domain 2 (the analysis and discussion of data) than other domains, with most of their assessment falling into the 'medium' category. It was also a logical, and expected next step on the improvement journey, following the recent changes to the teaching and learning framework, the improved consistency of teacher judgement, and the newly embedded CEO data dashboard, CeD3 (CEnet, n.d.).

The goal for teachers in upskilling in the use and analysis of data (and the school as a whole) was to be better able to track growth and achievement of students, and to ensure teachers could target their teaching and intervene where necessary. Since this decision was made, there has been a series of professional learning activities and introduced processes that have led to real growth in the school, and as a result, students are benefiting from the changes. Teachers and leaders have been very willing to learn and adapt their practice, resulting in significant and timely changes.

Introduction to data

The leadership team identified that their staff were at all different places with their data skills, from some having limited understanding of the data collected, through to staff who were regularly analysing and acting on formative, summative, and standardised assessment results. The school's data collection schedule is largely guided by the CEO, and the key data sets include NAPLAN, PAT Mathematics, PAT Reading, and Diagnostic Reading Assessments (DRA). The main challenge identified by the leadership team was that there was a need to focus on how data could inform action and change in the classroom – rather than only collecting and visualising it – so teaching could become better informed by the data and therefore more specific to the needs of the individual learners.

A series of professional learning sessions were designed through discussions with the leadership team and Dr Selena Fisk, the school data coach. The leadership team decided that it was best for teachers to be introduced to the bigger picture of the 'why' of data, as some saw key collection points as a compliance exercise, rather than understanding how beneficial the information could be. The first session was planned to offer an introductory data literacy professional learning session to bring everyone up to the same level of understanding. This session was then to be complemented by follow up sessions led by staff in school, and/or by the data coach, to continue to build teacher's skills over time. The idea of having subsequent professional learning sessions meant that staff could trial new approaches in their classroom in between sessions, and could come back together to share the things that worked for them and the challenges they faced.

The first professional learning session was a full staff professional learning day in October 2019. This session focused on the 'why' of data, and upskilled staff on the use and interpretation of student data, focusing specifically on NAPLAN results, class results, Diagnostic Reading Assessments, spelling assessments, and ACER PAT testing. In this full day professional learning session, the focus was very much on having a better understanding of St Anne's learners, and considering the differentiation and pedagogical shifts in practice that could occur by having a better understanding of students' strengths and gaps. This led to rich conversations about achievement of different students in different classes, the spread of ability in classes, the challenges that different teachers were facing, and alerted some teachers to elements of student performance that they had not previously been aware of.

At about the same time, new structures were established for the central collection of data in the school, where teachers could start to see (and subsequently build) a 'one stop shop' of all of the relevant data for their classes. The school has a system-wide visualisation dashboard to show summative and standardised testing data, but the dashboard does not (at this stage) allow for teachers to enter data for tracking during the term and/or for formative tasks, or view common

Year 3/4E Data 2020

Name	NUMERACY				ENGLISH			SPELLING, GRAMM	
	MATHEMATICS				2019 REPORT CARD	REPORT CARD MARK		Sound Waves Score	WTW
	Numeracy NAPLAN Year 3	2019 PAT-M	PAT-M Stanine						
	Numeracy Band		Term 1 Stanine	Term 4 Stanine		Sem 1	Sem 2	Term 1 / Term 4	Term 1
Adalyn Corbett	5	6		6	B	B		29	63
Ella Finlay				3				37	61
Skylynn Garcia	5	5		5	C	C		10	40
Lilly Hazel	4	5		5	B	B		31	64
Neena Payne	4	7		5	B	B		39	74
Kiara Wakefield	2	3		4	B	B		44	71
Sienna Whitaker	5	5		5	B	B		39	73
Mia Zaro	2	3		4	C	C		36	70

literacy or numeracy data from a number of data sources side by side (Fisk, 2019). Through the process of upskilling staff on the use of data, it was uncovered that staff wanted more centralised access to one data collection storage point, rather than collecting and storing data in different ways and on different computers. This, in part, supported them so that they knew what data was to be collected and when, and provided a structure in which they could to store and compare their literacy and numeracy data. Consequently, the creation of a central school spreadsheet created one place for teachers to store this information, and it created an almost 'non-negotiable' list of data that each teacher needed to collect and reflect on. As it is a small school, the tracking sheet is a single spreadsheet document, with tabs for each class. It also provides automatic colour coding of the data for teachers (as green: above average, yellow: average, and red: below average) to support their analysis and interpretation of the data (see the example below from this year). This approach has worked really well in our school, and a similar practice could be beneficial for other teams, or faculty groups in other contexts.

Follow up professional learning

In January 2020, teachers had a second day of professional learning, where they prepared for the academic year by considering historical class data of their incoming students. Teachers reviewed the data from the previous year and spoke with other teachers if they had questions about the demonstrated ability or challenges of their new students, or if there were gaps in the data. In the second half of the day, teachers considered the ways in which they planned and tracked formative tasks in their classroom and began signposting activities in the term where they could collect formative information and provide feedback to students. In addition, teachers considered ways in which they could bring students into the conversation about their own progress and achievement and looked at ways that learning, and tracking progress, could become more visible in the classroom.

Despite the COVID-related challenges of 2020, the school started (and has maintained) professional learning communities (PLCs) of teaching staff who meet on a semi-regular basis (DuFour et al., 2017). The turn towards a PLC models was a deliberate attempt to embed structures in the school that provided the opportunity for shared and collaborative practice, to support the broader improvement agenda. These PLCs consist of teachers from across year levels but in the same phase of learning, for example prep-Year 2, Years 3-4, and Years 5-6. A benefit of running PLCs while also upskilling and increasing the use of data is that the two practices are complementary, as teachers come to the PLCs to report the progress of their classes, with tangible and measurable progress results and formative assessments. Through the PLCs, it is clear teachers are more confident in talking about the data and the performance of their students. As a result, their

questions in PLCs are more targeted, and their chosen interventions have been evidence-informed and based on the specific needs of their unique learners.

Celebrating progress – September 2020

Given the challenges of 2020, the follow up professional learning in September 2020 focused on the ways to track, discuss, and celebrate progress in classrooms and in the school, rather than only focusing on achievement. Prior to this day, the leadership team decided that it would be good to celebrate progress across the school in the Developmental Reading Assessment (DRA) (Pearson, 2020), as Term 1 and 3 testing for all students is a system requirement for all students in the Diocese. The DRA program provides a structure from which teachers can ascertain reading levels of their students, as well as associated intervention and support strategies to improve reading. As students improve in their reading ability, they progress through the DRA levels, meaning that it is possible to consider growth from the level achieved in Term 1, to the level demonstrated in Term 3. In addition to the system requirements to collect the data, and despite the combination of home-based learning and in-school lessons, teachers also felt it was important to prioritise the tracking and reporting of reading progress and celebrate success with students.

Consequently, one of the outcomes of the professional learning in September was that teachers identified five students in their class who had made the most progress in DRA from Term 1 to Term 3. They did so by using the school data collection spreadsheet, where they calculated the number of levels that students moved. The students were recognised on assembly, and they received a certificate for the progress that they had made. The conversation on assembly was very different to previous assemblies where achievement was recognised, but the focus on learning gain was an important distinction to make. Rather than celebrating and talking about achievement, the Principal deliberately talked about persistence and progress, and discussed the fact that we can all improve in small ways all the time. In the introduction to the awards, the Principal said "today we are recognising the learners in our classes who have improved the most in reading. It doesn't matter where they started or where they ended up, what matters is that they tried and they are reading so much better now than they were a few months ago. They've shown that they have stuck with reading and have put in a lot of practice, and that persistence has paid off".

Another outcome of the meeting was a change in the data wall. Again, the data wall has always displayed DRA results, and has traditionally shown the levels achieved. However, given the focus on tracking progress and growth this year, the data wall was changed to represent the amount of growth students had experienced since Term 1. This focus on tracking progress an important distinction to

make, as schools and teachers are increasingly tasked with tracking and reporting on progress, as well as achievement (ACER, 2020; Education Council, 2019; Fisk, 2019). To do this on the data wall at St Anne's, teachers updated the data cards for their class and they were responsible for placing the student cards on the wall. As shown in the next image, each year level on the data wall is represented in columns from left to right (prep to Year 6), and the amount of progress students made determined their height on the wall. Students who were on the same reading level in Term 3 as they were in Term 1 were at the lower level, students who moved one or two levels were in the middle of the data wall, and students who moved three or more levels were placed at the top. The process of changing the data wall in the professional learning session and reflecting on the position of the cards led to some great conversations about the things that worked for different teachers in different ways. Teachers talked about the ways they had been able to engage students in reading during the pandemic, and the classroom strategies they had used to increased the amount of reading opportunities for students to bridge the gap. They discussed the fact that progress was harder to see for students who were already great readers, and they discussed opportunities and strategies to extend students at the top. Teachers were also affirmed as the wall showed that many students had made excellent progress throughout the year, even though it may not have always seemed like it!

Impact on learning

The use of data and being evidence-informed has clearly had an impact on student achievement and progress at St Anne's Catholic Primary School, and this is a journey that we plan to continue into the future. The following are a few other examples of the ways in which students are benefiting from their teachers using data (whether it be in-class, standardised, or summative assessments) to assess the needs of students and benefit their unique learners.

1. In 2020, 12 students across Years 4 to 6 have benefitted from an intensive reading program, Toe by Toe, which was used for students who were below the expected reading level. The program supports readers of any age who have challenges with either decoding or reading fluency, and provides the structure and incremental process required to improve. As a result of the professional learning on using data, the learning support team are more evidence-informed in their evaluation of the program, one example is shown in the graph below. The staff increasingly want to know that what they are doing is having an impact, and the following visualisation is one way they assessed the impact of the Toe by Toe program on these 12 students.

Average reading age of students at beginning of program versus Average reading age September 2020
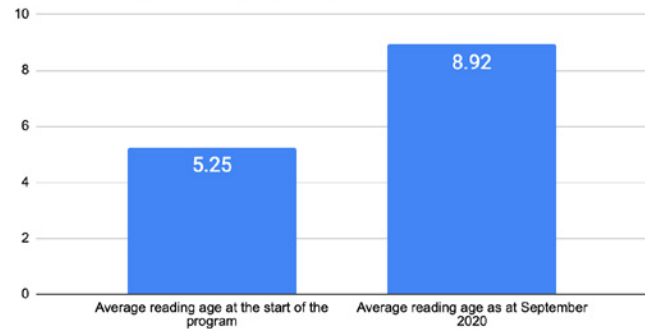
2. Following the professional learning session in January, a Year 6 teacher decided to think about the way he could involve students in the conversation about their progress. The teacher developed a 'Celebrating spelling progress' wall, and each student tracked their results in spelling tests throughout the term on their own line graph on the wall. The teacher reported that it led to some great conversations with students about how they were going, but more importantly, there was a focus on making progress and improving over time. The students began to understand that it was natural for marks to fluctuate a bit (and they would not improve EVERY week), but as long as their general trend was heading upwards, then they were progressing .
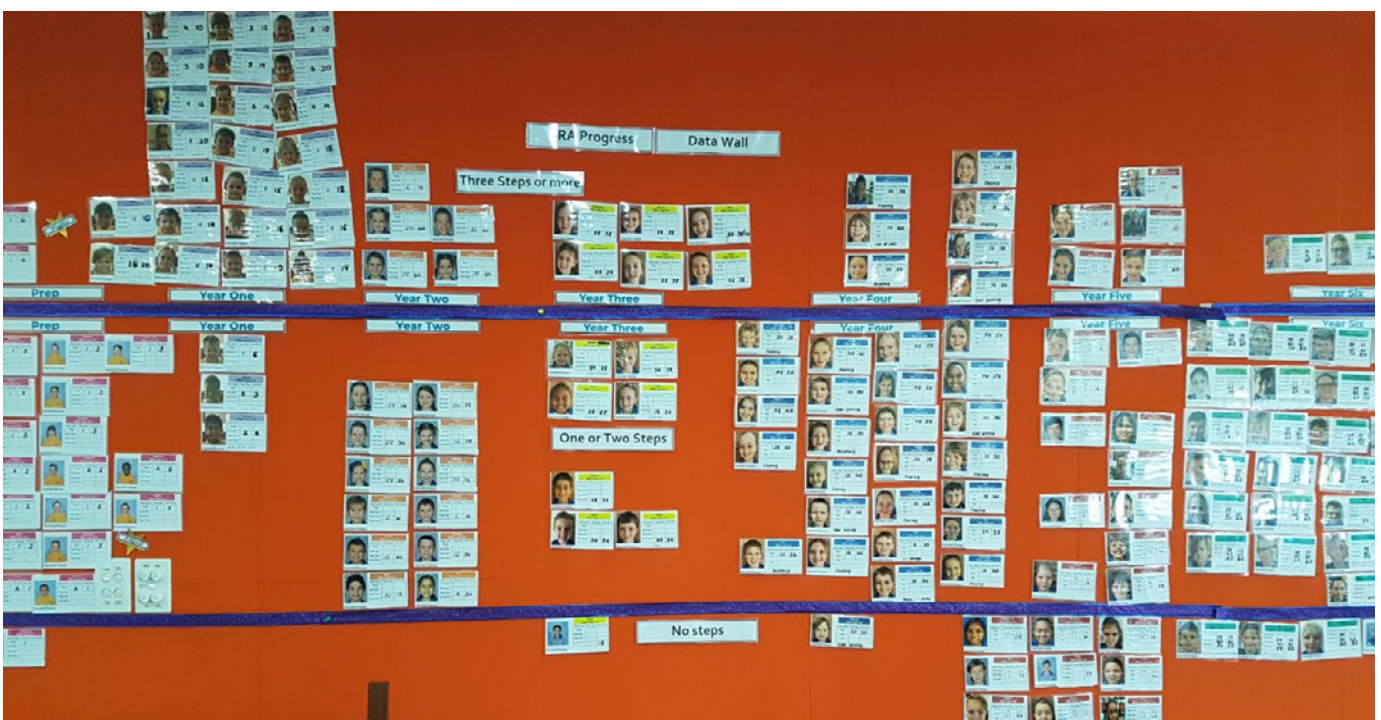
3. A teacher with a Year 3 and 4 composite class did two things a bit differently in 2020 than she had in previous years. The first was that she built a wall of 'times tables ninjas', where students progressed up the levels as they learned their times tables. This was different to her practice in previous years, as students were engaged in the process and their progress was made visible. At the beginning of the activity, students wrote their names on their ninja cards, and as they achieve success at the next level, they move the cards up the wall. In what can be a tricky context with Year 3 and 4 students having different times tables expectations, the teacher did a great job of adding the additional Year 4 times tables to the right side, so Year 3s progress up their levels, and Year 4s up the other.

4. The second shift trialled by the Year 3/4 teacher this year was having students develop their own goals for the year. She explained the idea of a SMART goal, and students planned their goals and when they would re-assess their goals. Once students completed the SMART goals sheet in their workbooks, they wrote a summary of their goal on a sticky note and put in on the classroom wall. As seen in the images, this was done in a way that was age-appropriate, and the students generally did a good job of setting (and achieving!) their own goals. As the year progressed, students would reflect on whether they achieved their goal and they would add an update in a second sticky note on the wall.

We are really proud of the teachers at St Anne's Catholic Primary School for being so willing to try new things, particularly in what has been a really challenging year to be a teacher. We know that as a result of our increased focus on being data-informed, our teachers have a better understanding of their students' academic strengths and weaknesses than ever before, and we know that ultimately it is our little people who benefit from this understanding. Being more evidence-informed in what we do is our goal and priority, and we hope that our students continue to experience more success as teachers are able to more specifically target their teaching to their needs.

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John Ballinger-Oches is the principal at St Anne's for 16 years, and has been a principal in primary schools for 21 years in total. In his career, John has also been engaged in classroom teaching and a role as APRE.

Linda Holmes is the Assistant to the Principal: Curriculum at St Anne's. She has been in this role for 3 years and has been part of the teaching staff at St Anne's for 9 years. Linda has been in the teaching profession for 22 years in total.

Selena Fisk has 15 years' teaching experience in both state and private schools in Queensland, and in comprehensive schools in South London, England. Selena began a Doctor of Education degree at the Queensland University of Technology on her return to Australia. Selena has held a range of leadership roles in London and in Queensland, including learning-area-specific leadership (physical education, mathematics and science) and whole-school curriculum and pedagogy (in Catholic identity, student data and performance, and leading learning, data and curriculum change). In 2017, Selena started her data consultancy practice – Aasha for Schools – following completion of her thesis. In this capacity, she works with schools, clusters and regions both in-person and via video conferencing. Her goal is to help teachers and school leaders see the inherent good that data can bring as well as the benefits of using data to develop thriving learning communities.