



CEDP GAINS VALUABLE INSIGHTS INTO SCHOOLING OUTCOMES WITH MIP



The Catholic Education Diocese of Parramatta (CEDP) comprises 80 primary and secondary schools in one of the fastest growing areas of New South Wales. The organisation's goal is to provide quality schooling and improve the learning outcomes for each student in a Catholic faith community.

ORGANISATION PROFILE:

CEDP operates both some of the oldest and newest schools in Australia. St Patrick's in Parramatta has links back to 1820 while schools at Rouse Hill and Westmead have been established recently. The current CEDP student population is 45,000 served by some 8000 staff members.

CHALLENGES:

- Siloed information stores
- Inability to readily analyse data
- No clear picture of the impact of changes on education

SOLUTIONS:

- Tableau
- Alteryx

OUTCOMES:

- Significantly improved data analysis capabilities
- Intuitive dashboards provide data visualisations
- Ability to track key variables over time

BUSINESS CHALLENGES

Siloed information stores

Each school collects a large amount of data during the course of the academic year. From attendance records and academic results to budgets and maintenance logs, much of it was captured in spreadsheets and stored in multiple different locations.

Inability to analyse data

Because data was spread across the organisation, there was no way for it to be readily aggregated for analysis. Over the years, different staff members had created their own spreadsheets with no thought of following a standardised approach making it all but impossible to combine. Also, the schools had no access to analysis or visualisation tools.

No clear picture of the impact of changes

School management struggled to monitor and track the impact of changes to strategy or allocation of resources. Trends such as student progress, the impact of staff development and investment in new teaching infrastructure could not be readily analysed and reviewed.

SOLUTIONS

In late 2015, CEDP took the decision to undertake an initial trial of data analysis and visualisation tools. After reviewing a range of options on the market, it was decided to use software from Alteryx and Tableau for the trial.

“The tools were used for some initial data analysis and the creation of a number of dashboards,” says Varanasi. “Once the school principals could see what was possible, they became very enthusiastic and so we quickly embarked on the next phase of the program.”

To complete the next phase of the program, CEDP retained the services of MIP. Together, the two organisations mapped out plans for a six-month trial of the analysis and visualisation tools across eight schools in the group.

“MIP was the logical choice for us as we could quickly see that, as well as having deep knowledge of data analysis, they were very much on the ball when it came to relationship management,” he says.

Once the six-month trial had been successfully completed, the CEDP IT team worked with MIP to roll out Alteryx and Tableau software to all schools. Data from multiple sources within each school was aggregated and analysis undertaken to identify useful insights and trends.

“Our data was locked in spreadsheets spread across the organisation. We had no way to capture this data and put it to use through analysis.”

Raju Varanasi

Chief Information Officer, CEDP

OUTCOMES

Significantly improved data analysis capabilities

With key data sources now accessible across the organisation, the ability to perform complex analysis has never been easier. Variables such as student attendance, demographics, staff training and investments in infrastructure can be reviewed and contrasted in a variety of ways. Analysis that previously would have taken days or even weeks to complete can now be done in real time.

Intuitive dashboards provide data visualisations

Digital dashboards are now available to all staff and provide a simple yet powerful way to view data sets and the relationships between them. Teachers can quickly see how their classes are performing relative to others and the impact that changes to school programs and policy is having on the student population.

Ability to track key variables over time

With data now stored and accessed centrally, managers and teachers have the ability to track changes in key variables over time. As well as allowing current performance to be compared with previous years, it also provides an opportunity for future projections based on new initiatives in the schools.

ONGOING MONITORING AND ANALYSIS

CEDP has developed the ‘Six Lenses for School Effectiveness’ approach to data analysis. This involves using the tools to track variables in the key areas of student performance, resourcing and regulation, community and culture, teacher development and school performance.

“The six lenses approach shows how we can take data sets relating to very different things and discover interrelationships between them,” says Varanasi. “For example, we can discover the relationship between attendance rates and school culture or between teacher development and resourcing.”

As an example, analysis found there was a significant difference in the results scored by students in school-based exams compared with those achieved in national standardised tests. “Such insights mean we can shape our teaching approaches to ensure students receive as rounded an education as possible,” he says.

The dashboards can also be used during parent-teacher interviews, significantly reducing the amount of preparatory work required by teachers. Key metrics can be shared on a screen and student performance tracked closely over the academic year.



CONTINUING PARTNERSHIP

With significant benefits already being realised by all schools, Varanasi says the relationship with MIP will continue. “I have the objective that, within three years, this will be the best school system in Australia,” he says. “MIP’s expertise in data analysis and visualisation will help us to achieve this aim.”

“MIP is a valuable partner who has helped us ensure that we can extract maximum value from all our data sources.”



CALL US TODAY TO FIND OUT HOW WE CAN HELP YOUR BUSINESS. **1800 737 126**