

Getting under way with PaCT at Otago Girls' High School

About the school

Otago Girls' High School caters for approximately 800 students from years 9 to 13 and is located in Dunedin's city centre. The school is proud of its history and heritage, and these aspects, along with its values, underpin its programmes of learning. Respect, positivity and integrity are the cornerstone values that guide the school's work.

The content and pedagogical knowledge of the nine teachers in the school's mathematics department is strong, with almost all of the team having completed a mathematics or science degree. The department was invited to participate in an inquiry into how the curriculum progress tools – the Learning Progression Frameworks (LPFs) and the Progress and Consistency Tool (PaCT) – could be used effectively by secondary mathematics teachers. After learning about the related but different purposes of the two tools and the resources that had been developed to support schools to use them, the six members of the team who taught only maths decided to participate. They were specifically interested in learning more about PaCT and finding out whether they could use it for tracking progress and achievement in mathematics.

Understanding the LPFs

During the second session, the team worked with the facilitator to unpack the mathematics framework of the LPFs. The framework supports teachers to understand what progress looks like, and teachers use it as they make judgments in PaCT. The group completed a PLD activity from the curriculum progress tools website which involved exploring the framework and included putting the illustrations from one of the aspects in order from least to most sophisticated. This helped them become familiar with the structure and design of the framework. They then linked some of the algebra problems they had recently been using with their students to the two algebra-related aspects of the framework and considered how the

signposts in these aspects related to their classroom programmes.

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Making and recording judgments

During the third session the teachers continued their work with the two algebra-related aspects and focused on making judgments for their students. They followed the process described on the curriculum progress tools website for making aspect judgments efficiently. They also worked through another PLD activity from the website to

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make aspect judgments for one of their classes. They used what they knew about students' work in class to make judgments, and the end-of-topic tests they had brought along helped jog their memories where required. They were shown how to enter aspect judgments in the PaCT demo and tried this out for themselves.

The teachers were very surprised at how quickly they were able to make a set of aspect judgments for their class, and they particularly appreciated being able to access the illustrations of the LPFs directly from inside PaCT. They reflected that making aspect judgments in PaCT was a quicker process than marking using the achieved/merit/excellence grades that they currently use in years 9 and 10. Their comments included:

"There were two main selling points for me – the illustrations that make it easy to see the differences between the signposts, and the process for making group judgments, which is easy and quick."

"It looks like it's going to be useful – it takes very little time, and it's very user-friendly."

The teachers were also shown how to confirm an overall judgment and were given an overview of the information they can access in the reports that PaCT provides. The fact that PaCT provides an overall judgment which is aligned to the levels of the New Zealand Curriculum appealed to the teachers, as they currently find it challenging to accurately assess student achievement in years 9 and 10.

"This is a much clearer way for us to know where students should be – how else do we know if a student's at the right level?"

Beginning to work with PaCT data

The teachers held their final session near the end of the school year. The focus was on making aspect judgments for all of their year 9 students and entering these into PaCT. They knew that it was not ideal to be making all these judgments at the end of the year, but this was the only possibility as the school's PaCT account had only been set up recently. As before, they worked collaboratively and used their professional knowledge of students to make judgments, supported by the students' end-of-year exam papers. They found the exams were helpful, particularly for those units which they had taught several months previously, but they could see that it would be much more efficient to make and record aspect judgments for their classes directly after a focused unit of teaching, when the students and their work were fresh in their minds. They planned to do this in the future and anticipated that they would be able to make judgments on all aspects twice a year: near the end of term 2 and near the end of term 4.

As work continued, a few of the teachers were able to confirm overall judgments for their students. They were excited to see data for their own students in the reports and pleased that the information in the reports confirmed their own views about students' achievement. They were particularly interested in the information the class reports can provide to inform planning. They commented that it would be ideal if their contributing schools became PaCT users, as this would give them reliable and consistent information for their year 9 cohort at the start of the year.

The teachers are planning to confirm overall judgments in mathematics for all of their year 9 students by the end of the year and are looking forward to having time to explore the reports available in PaCT once all these judgments have been entered. They are also looking forward to tracking these students into year 10 and seeing their progress over time. As they become more familiar with PaCT, they are planning to transition to using PaCT as the main source of data for tracking progress in mathematics in years 9 and 10 and are very pleased that other teachers within the school are also working on using PaCT in reading and writing.