## AFTER 2 YEARS AT SCHOOL: STRATEGIES AND RESOURCES THAT WILL HELP (including what research says)





The Progress and Consistency Tool relating to mathematics aspects provides extensive background material to assist teachers to make judgments about their students' strengths and needs: http://assessment.tki.org.nz/Progress-and-Consistency-Tool/The-PaCT-framework/PaCT-aspects/
Mathematics-aspects
The Junior Assessment of Mathematics can be used with students in Years 1-3 to identify students' strengths and needs at Levels 1 and 2 of the NZC: http://www.nzmaths.co.nz/junior-assessment-mathematics
The following link directs teachers to the NZC updates: http://nzcurriculum.tki.org.nz/Curriculum-resources/NZC-Updates
Update 4 provides information on literacy and numeracy and the integration of the key competencies.
A number of professional development modules are available through this link to the NZ Maths site: http://www.nzmaths.co.nz/professional-development
The NZ Maths site provides access to a large range of mathematics units across the number and algebra, geometry and measurement and statistics strands and across the curriculum levels. In addition a range of curriculum support materials are available: http://www.nzmaths.co.nz/teaching-material
NZC Curriculum Update 17 provides background information and case studies of schools as they develop a range of mathematics interventions for their students: http://nzcurriculum.tki.org.nz/Curriculum-resources/NZC-Updates/Issue-17-February-2012/Mathematics-learning-Three-tiers-of-support
The following link directs teachers and principals to information on the <i>Programme For Students (PFS)</i> support <i>Accelerated Learning in Mathematics (ALiM)</i> that may be available for schools supporting students with significant learning needs: http://nzcurriculum.tki.org.nz/System-of-support-inclPLD/School-initiated-supports/Accelerated-Learning-in-Literacy-Mathematics
The best evidence synthesis (BES) on effective pedagogy in Pangarau/Mathematics provides extensive background on the links between pedagogy and achievement in mathematics: http://www.educationcounts.govt.nz/publications/series/2515/5951
The cases exemplified in the BES exemplar at this link describe the chnages two teachers made in their mathematics teaching that led to substantial student gains in 1 year: http://www.educationcounts.govt.nz/topics/bes/spotlight-on/spotlight-on-mathematics-pangarau
The following link to the resource finder on the NZ Maths site provides access to multiple teaching resources across curriculum levels, strands and objectives. It should be noted that students with more significant needs may need to be working at curriculum levels lower than that expected for their year group: http://www.nzmaths.co.nz/resource-finder

QUESTIONS	SOURCE
How do I help my focus students?	This link has specific resources to support learners not on track to meet expected outcomes: http://www.nzmaths.co.nz/accelerating-learning
And how do I help the students in my class who have a range of English proficiency?	This link provides specific guidance, support and activities to engage students whose first language is not English in mathematics learning: http://esolonline.tki.org.nz/ESOL-Online/Teacher-needs/Pedagogy/ESOL-teaching-strategies/Oral-language/Teaching-approaches-and-strategies/Thinking/Ensuring-maths-units-meet-the-needs-of-ESOL-students
How can I target my classroom teaching for these students with their diverse language skills and needs?	The following resource provides a wealth of information about how you can provide more opportunities for your students to learn and practise their reading skills in authentic curriculum contexts: http://esolonline.tki.org.nz/ESOL-Online/Teacher-needs/Reviewed-resources/Supporting-English-Language-Learning-in-Primary-School-SELLIPS
	These resources give suggestions for helping not only those students who are learning English as an additional language, but also those students who would benefit from explicit English language support. They give suggestions for developing students' academic, cross-curricular English language.
	This report from the Quality Teaching and Research Development project highlights a number of classroom practices and teaching approaches found to support the learning of Māori and Pasifika students in English Medium education: http://www.educationcounts.govt.nz/publications/91416/english-medium-education/49176
	The LEAP (Language Enhancing the Achievement of Pasifika Students) resource provides support for teachers of students in Years 1-8 who are acquiring English language proficiency. It is important to note that teachers should use resources below students' year levels where those students' needs are greater: http://leap.tki.org.nz/About-LEAP
Where can I get some specific ideas from, especially for different learning areas and different levels of the NZC?	This link to the NZ maths site provides access to a range of cross-curricular units with mathematical elements at a range of different levels: http://nzmaths.co.nz/node/1949
Where can I get started planning mathematics in different learning areas?	Teachers will need to register to use this part of the NZ Maths site for planning teaching and learning to meet students' mathematical learning needs: http://nzmaths.co.nz/planning-space