

The New Zealand Curriculum

Update



Research into Practice

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Welcome to *The New Zealand Curriculum Update*

Curriculum Updates support school leaders and teachers as they work to design and review their school curriculum, in line with the New Zealand Curriculum and with current knowledge and understandings about effective classroom teaching.

Curriculum Updates are published in the *Education Gazette* and are available online at www.nzcurriculum.tki.org.nz/curriculum_updates

This Update describes observations made by the Education Review Office (ERO) in a recent evaluation of how New Zealand schools were using the teaching as inquiry process.



Understanding teaching as inquiry

The New Zealand Curriculum describes teaching as inquiry as a cyclical process in which questions are posed, evidence is gathered, and decisions are made. The primary purpose of teaching as inquiry is to improve outcomes for students through purposeful assessment, planned action, strategic teaching, and focused review.

In 2010–11, ERO looked at how schools were using teaching as inquiry as outlined in The New Zealand Curriculum.

ERO was interested in:

- what school leaders were doing to strengthen teachers' understanding of the teaching as inquiry process
- how school leaders were helping teachers to use the process
- how individual teachers were using teaching as inquiry in their classrooms.

In the schools where ERO found teaching as inquiry to be well established:

- teachers were equipped with the skills to use the process

- leaders supported and modelled inquiry and expected it to happen
- teachers were committed to making a difference for their students.

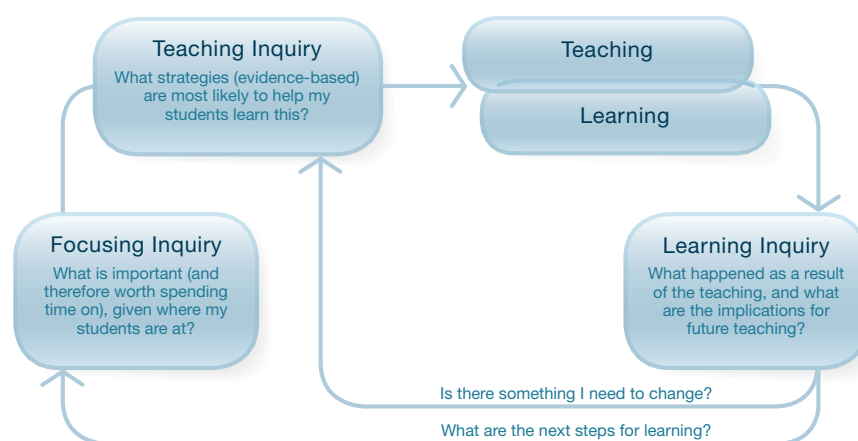
A school is well on the way to supporting teaching as inquiry when its leaders encourage teachers to challenge their thinking about students' learning, for example, by exploring relevant research literature.

The process of teaching as inquiry

Teaching as inquiry is a systematic process for teachers to use in their classrooms and in professional learning groups. It draws on the successful experience of teachers and on respected sources of research.¹

Teachers' decisions should be based on a thorough understanding of their students' learning needs and a candid examination of their own practice. This examination is followed by inquiring into the impact of their practice on their students and by considering what additional practices might improve outcomes for their students. Teaching as inquiry is hence a four-phase cyclical process.

¹ The teaching as inquiry cycle was developed by Aitken and Sinnema (2008) and presented in *Effective Pedagogy in Social Sciences/Tikanga ā Iwi: Best Evidence Synthesis [BES]*.



These kinds of questions guide teachers in their inquiry process:

- What should our students achieve? Where are they in relation to the school's goals and priorities? What do they need to learn next? (focusing inquiry)
- Which teaching strategies will support the students to achieve the identified outcomes? (teaching inquiry)
- What learning happened for the students? What will we do next to ensure that they continue to achieve? (learning inquiry)

ERO's findings

The leader's role

ERO found that school leaders played a major role in establishing supportive activities, systems, and processes for teachers who were implementing teaching as inquiry. They helped to make it possible for teachers to meet in groups, investigate data, reflect on why problems might be occurring, and consider approaches or strategies that could promote better outcomes for students.

Effective leaders promoted a culture of trust, open-mindedness, responsibility, and wholeheartedness (see Reid, 2004, for a discussion of such a culture). They allowed for fallibility² and encouraged persistence (Aitken and Sinnema, 2008).

² Aitken and Sinnema describe fallibility as "accepting the possibility that what was, or what has been, successful with one group of learners may not be successful for another and that, for this reason, well-designed intentions might fail to generate the desired response" (page 53).

The teacher's role

ERO found that the teachers using teaching as inquiry most successfully came from schools where the staff worked together on understanding the process and putting it into practice.

These schools had developed a culture of staff working as a team and sharing their aspirations to improve learning and teaching.

The teachers met regularly to focus on learning and teaching activities. Their discussions of practice were based on good data and information, which were used throughout the school. These discussions helped to build commitment to group decisions and ensured more consistent implementation of agreed practices.

Individual teachers engaged in practices that provided evidence for discussion and inquiry. They:

- recorded information about students' learning and noted actions to improve learning
- wrote end-of-term classroom or syndicate programme evaluations
- observed and gave feedback on one another's practice, noting issues or ideas to follow up in discussions.

Involving students

Teaching as inquiry is most useful when teachers invite and encourage students to participate in the process, for example:

- by taking responsibility for working towards goals they have identified with their teachers
- by reflecting with teachers on their personal progress and achievement
- by giving teachers useful information about the impact of teaching practice on their learning and engagement.

Teaching as inquiry, used well

ERO found that schools using teaching as inquiry effectively to inform and support their practices:

- called on external expertise to build teachers' understandings
- adjusted school systems to integrate teaching as inquiry into classrooms and across the school
- made links between professional development programmes and the process of teaching as inquiry.

Teaching as inquiry was an expected and monitored component of school practice. It happened in many and varied ways and, typically, included discussion in teacher groups or among school leaders. Such discussion focused on combinations of:

- sharing a problem of practice (for example, how best to support students whose progress was not at the expected level)
- analysing data to discover which teaching strategies had been successful and where improvements were needed
- deciding on appropriate teaching strategies and approaches.

Next steps typically included improving teachers' assessment practices and making use of relevant research in developing plans for improving teachers' practice and students' learning.

Teaching as inquiry: The wider context

ERO's evaluation identified several areas that closely link to and support the effective use of teaching as inquiry.

School-wide inquiry

An inquiry approach was most frequently applied when teachers and leaders were reviewing school or syndicate information about students' progress. They explored this data and then made decisions on how best to support students or groups of students not meeting expectations. Options included: planning school-wide initiatives, selecting appropriate learning programmes, choosing which strategies individual classroom teachers would use, and setting targets for students regarded as a shared priority – those most at risk of education failure.

Teachers discussed, in depth, syndicate-wide assessment data. From these discussions, they identified students (individuals and groups) at risk, areas of concern, and strategies to address these. From these discussions, each syndicate also identified syndicate goals for the term.

Year 1–6 contributing primary school³

³ The quotations on this page are sourced from *Directions for Learning: The New Zealand Curriculum Principles and Teaching as Inquiry* (Education Review Office, 2011).

Inquiry as performance management

Some schools operated their performance management system as an inquiry cycle. Information about students' learning was used to set goals for teacher practice. Then evidence about students' and teachers' progress was collected and reviewed, and the goals were reset. The objectives for implementing performance management in this way were:

- to build teachers' capacity for thinking about their own practice and its possible impact on students' learning
- to link performance management to school-wide targets.

Each teacher set a development goal that came from school targets about increasing student engagement. Teachers set their goals using data gathered from class observations, videoing, and self assessment. Information from these goals fed into an overall review of the school target. Twice a year, teachers had meetings with the principal, where they discussed individual student achievement and progress against set targets. From these discussions, teaching approaches were considered.

Year 1–6 contributing primary school

Leaders' support for teacher inquiry

Leaders developed frameworks for teachers to follow, for instance, a set of questions to guide inquiry at school and classroom level, or different planning and assessment systems. Formal frameworks, as part of the performance management system, encouraged observation and critical reflection.

Teachers were well supported by clearly documented guidelines for planning, teaching, and assessment. They benefited from targeted and well-planned professional development. Teaching as inquiry was supported by the self-review system developed by senior managers. Self-review focused on raising students' achievement by improving practice. Professional development and the performance management system were closely aligned to supporting teachers in improving their practice.

Year 1–8 primary school

Inquiry: A professional way of being

Strong inquiry was demonstrated where teachers showed a desire to make a difference for students, a disposition to include students in the processes of learning, a curiosity about what would make students' learning better, and a willingness to improve teaching practice.

Students in these schools were encouraged to set goals on the basis of the information teachers had gathered on them and to reflect on their progress. Some students were involved in negotiating the criteria used in assessing their work.

Some teachers took this student-focused practice further by talking to their students about which aspects of teaching they had found most beneficial. Teachers then adapted their programme or practice.

The teacher had conferences with students about their next learning steps, was open and inclusive, and [was] highly reflective in her approach. For example, she conducted end-of-year surveys and had lots of one-on-one conversations with students about how they were finding the work. Many units of work had self-evaluations, which students filled out, and these were filed in the student portfolios. The teacher had made comments on these, showing an awareness of how students experienced the teaching.

Year 1–15 composite school

Students were fully aware of their progress and grades. They had copies of the indicators used by teachers to make judgments about the quality of their work. Students carried out self-assessment activities and met with teachers to discuss their progress and next steps. There was a clear emphasis on individual progress and a personal approach to achievement.

Year 9–15 secondary school

Next steps for school leaders and teachers

ERO's evaluation suggests that teaching as inquiry is a vital and integral part of everyday teaching practice in many New Zealand classrooms.

ERO would like to see school leaders and teachers:

- build deeper understanding of the process of teaching as inquiry and the contexts in which it can be used to improve learning and teaching
- create opportunities for sustainable professional learning about effective teaching practice by incorporating teaching as inquiry into their performance management systems.

It is important that teachers have the flexibility to adapt their programmes when they have evidence that doing so is likely to benefit students' learning. School leaders have an important role in supporting teachers to

balance the documented school curriculum with the emerging needs, interests, and strengths of their students. Where school leaders give teachers a clear message that this is not only permissible but also desirable, teachers will be more inclined to inquire into their practice and adjust it.

It will also be valuable if leaders and teachers are supported to access and read relevant research that challenges thinking about their current practices. ERO has recommended that the Ministry of Education extend the understanding of teaching as inquiry among teachers and school leaders by exploring ways to make research materials more accessible.



Guiding questions He pātai

To what extent does our school support teaching as inquiry?

- What guidance is provided for teachers?
- What do our school leaders do to help teachers improve their use of teaching as inquiry?
- What information do we use to determine what our students have already learned and what they need to learn next?
- How confident are we in linking specific student learning to specific teaching actions?
- Does our school culture foster collaborative inquiry into practice?
- What do individual teachers contribute to self-review and to syndicate or team discussions in our school?

Teachers as Learners: Improving Outcomes for Māori and Pasifika Students through Inquiry

This set of online materials for teachers and school leaders explores teaching as inquiry and culturally responsive pedagogies. It provides an overview that draws on teachers' experience in the Quality Teaching Research and Development (QTR&D) programme. Seven substantial learning stories explore teaching as inquiry in different curriculum areas. To read more, go to www.nzcurriculum.tki.org.nz/Curriculum-stories/Case-studies/Inquiry

Helpful resources

Aitken, G. and Sinnema, C. (2008). *Effective Pedagogy in Social Sciences/Tikanga ā Iwi: Best Evidence Synthesis Iteration [BES]*. Wellington: Ministry of Education. Retrieved from www.educationcounts.govt.nz/publications/series/2515/32879/35263

Alton-Lee, A. (2003). *Quality Teaching for Diverse Students in Schooling: Best Evidence Synthesis Iteration [BES]*. Wellington: Ministry of Education. Retrieved from www.educationcounts.govt.nz/publications/series/2515/5959

Earl, L. M., Timperley, H., and Stewart, G. M. (2009). *Learning from the QTR&D Programme: Findings of the External Evaluation*. Wellington: Ministry of Education. Retrieved from www.educationcounts.govt.nz/publications/maori/49172

Education Review Office (2011). *Directions for Learning: The New Zealand Curriculum Principles and Teaching as Inquiry*. Wellington: Education Review Office. Retrieved from www.ero.govt.nz/National-Reports/year/2011

Reid, A. (2004). "Towards a Culture of Inquiry in DECS", *Occasional Paper Series*, no. 1. Adelaide: South Australian Department of Education and Children's Services. Retrieved from www.decs.sa.gov.au/learnerwellbeing/files/links/link_72576.pdf

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