

The spiral of inquiry: An introduction to scanning



ECE resources

Inquiry begins with the consideration of children's learning needs and families' aspirations, and how well these are being met by current teaching practices. The purpose of the scanning phase is to get an overview of the whole group of children and their areas of strength and need. This should be broad rather than focused on easily measured outcomes. It should include children's behaviour, engagement, learning dispositions and teacher practice, and invite the perspectives of children, families and communities. Scanning helps teachers to unpack curriculum requirements and understand where there are differences between children's expected and actual learning in relation to their families' aspirations and the learning priorities of the setting. This then enables teachers to identify gaps and plan appropriate action towards improvement.

A guide to the scanning phase

It is beneficial to **start with a question**. Questions about differences, gaps, characteristics and qualities, the impact of teaching practices and curriculum and so on provide useful starting points. How are your children doing in their learning? What jumps out as an area of need, and as an area of strength? Scans may be imperfect initially and you may need to conduct more than one scan, but it is important to **just get started**. Be curious about learners and their learning, and your own teaching practice. Remember not to rush, but don't get bogged down in this phase either. Get an overview, not perfect coverage.

As you begin to investigate the ideas about strengths and needs that come up in your first preliminary scan, try to **describe children's learning as accurately as possible**. Seek evidence: conduct an audit of portfolios to assess coverage, depth and continuity across children's individual learning. Observe children and teachers' activities at different times of the day. Aim to understand where children are in their learning in relation to the learning outcomes of *Te Whāriki*. **Look at children's learning processes**, or what they are saying or demonstrating about their thinking during an activity. Include all the areas of learning across the breadth of *Te Whāriki*.

Remember to **invite the perspectives of children and their families**. Ask children to talk about, or take photos of, what helps them to learn and what they enjoy and don't enjoy about the setting. Consider using questionnaires to seek input from families and the community. **Maintain high expectations for children**, and ask yourself whether their experiences are providing them with the valuable opportunities for learning they need in order to succeed and thrive.

Once you have started to gather evidence, you can begin to analyse it. It might be helpful to share your evidence with your team or a critical friend to reflect on what it might be telling you. **Stay open to new information and insights**: scanning does not mean finding evidence to support the status quo. It might be useful to **create an overview** that contains a succinct and well-organised summary of the evidence relevant to your question to provoke thinking and discussion.

Scanning questions

The following questions may be useful during the scanning phase¹:

- What is happening for children in your setting?

- How are children doing in relation to your setting's priorities for learning?
- Do children show trust, a strong sense of self-efficacy and sense of self-worth?
- Are routines flexible and responsive enough to support children's learning?
- Do children have genuine opportunities to make choices and develop independence?
- Are the languages and cultures of all children affirmed in the setting?
- Do children have opportunities to explore, connect to, respect and care for the environment?
- How strong are relationships between children and teachers, and how emotionally supported do children feel?
- Are children developing prosocial strategies for relating to each other?
- Do all children experience fair and equitable opportunities for play and learning, aligned with their interests, strengths, preferences and abilities?
- Do children, parents and families contribute to curriculum decision-making?
- How effectively do teachers respond to children's non-verbal communications?
- How often do children have sustained interactions with teachers?
- How effectively is te reo used and encouraged?
- How well do teachers recognise and respond to diversity in language acquisition?
- Are children offered literacy and numeracy activities that enable them to learn concepts about print and mathematics and develop knowledge of symbols?
- Do children have sufficient opportunity to listen to, retell and create stories?
- How effective are resources and opportunities for encouraging creative and artistic expression?
- Do children have sufficient opportunities to explore and develop their physical capabilities?
- How effectively are children supported and empowered to pursue challenges that build on their spontaneous play, capabilities, interests, and working theories?
- Do children adopt a range of strategies for exploring, thinking, reasoning and problem-solving?
- What opportunities are there for children's inquiry or longer-term projects related to the development of their working theories?
- Which learning dispositions do children tend to be most / least motivated to use, and what contexts do they demonstrate important learning dispositions in? What other contexts could be important?
- What do children tell you while looking at their portfolios? Can they describe their strategies for thinking and learning, what they have been learning, and why these are important?

Tools for scanning

The following tools may be useful to teachers to collect evidence during the scanning phase, although it is not necessary to use any formal tools during scanning.

Initial scan tool: This template is designed to help teachers develop a sense of what is happening for children with whom they are working. The tool equips you to collect observational data, as well as children's perspectives on the learning and activities.

Observation template: This tool has been designed for use by a colleague or critical friend to observe your practice and collect observational data. It also provides a tool to collect information about your interactions with children. Teachers could also use this template when watching a video of their own practice.

Next steps

Once you have collected some evidence, consider whether you need to collect more, or if you are ready to move on to the focusing stage. Sharing your evidence with a colleague or your team might be helpful at this stage.

References and further reading

Halbert, J., & Kaser, L. (2013). *Spirals of inquiry*. BCPVPA Press, Vancouver.

Handscomb, G., & MacBeath, J. (2006) Professional development through teacher enquiry. *SET – Resources for teachers*, 1, 40-45.

Ministry of Education (2011). *Understanding teaching as inquiry*. New Zealand Curriculum Update (12), 1-4.

Sinnema, C., & Aitken, G. (2016). *Teaching as inquiry*. In D. Fraser & M. Hill (Eds.), *The professional practice of teaching in New Zealand*, pp. 79-97. Melbourne, Australia: Cengage Learning.

Te Kete Ipurangi (n.d.). *Inquiry and the key competencies*. Retrieved from <http://assessment.tki.org.nz/Assessment-in-the-classroom/Teaching-as-inquiry/>

[Teaching-as-inquiry-practical-tools-for-teachers/Inquiry-and-the-key-competencies](http://teaching-as-inquiry-practical-tools-for-teachers/inquiry-and-the-key-competencies)

The Literacy and Numeracy Secretariat. (2010). *Collaborative teacher inquiry: New directions in professional practice*. Retrieved from http://www.edu.gov.on.ca/eng/literacynumeracy/inspire/research/CBS_SystemLeaders.pdf

Timperley, H., Kaser, L., & Halbert, J. (2014). *A framework for transforming learning in schools: Innovation and the spiral of inquiry (Seminar series 234)*. Melbourne: Centre for Strategic Education.

Endnotes

1 Questions adapted from Te Whāriki and Timperley, H., Kaser, L., & Halbert, J. (2014). *A framework for transforming learning in schools: Innovation and the spiral of inquiry (Seminar series 234)*. Melbourne: Centre for Strategic Education.

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