

Have I developed a quality investigation?

Investigation

- Has the investigation been framed in terms of:
 - a problem to be solved
 - a question to be answered
 - a significant task to be completed
 - an issue to be explored?
- Is the investigation flexible and open-ended?
- Were students involved in negotiating the context or the focus for learning?
- Is the investigation built around a real-life or lifelike context?
- Is the investigation relevant to students' interests and needs?
- Is the purpose of the investigation clear?

Learning outcomes

- Have the learning outcomes that are the focus of the investigation been made explicit?
- Does the investigation provide opportunities for students to demonstrate their learning?
- Have learning opportunities been included for students working towards the level before and the level after the focus level?
- Does this investigation provide opportunities to further students' learning?
- Does this investigation promote deep mathematical understandings?

Contribution to the attributes of a lifelong learner

Does the investigation provide opportunities for students to develop some or all of the attributes of a lifelong learner? These are:

- knowledgeable person with deep understanding
- complex thinker
- responsive creator
- active investigator
- effective communicator
- participant in an interdependent world
- reflective and self-directed learner.

Sequence of learning activities

- Are learning activities sequenced in a way that scaffolds understanding?
- Is the sequence of learning clear?
- Do the learning activities provide opportunities for students to demonstrate their learning?
- Does the planned teaching and learning process encourage active, hands-on participation?

Core content

- Has the core content relevant to this investigation been made explicit?
- Has the 'nestedness' of the core content been considered to cater for students at the level before and the level after the focus levels?

Students

- Have students been given adequate time and opportunities to demonstrate their learning?
- Is each student able to participate in the investigation?
- Has each student been supported and challenged?
- Does the investigation encourage positive dispositions towards mathematics?

Resources

- Are the resources relevant and lifelike?
- Are the resources readily available?
- Are resources readily accessible to all students?

Assessing learning

Sources of evidence

- Have opportunities for assessment been identified within the sequence of learning?
- Will information be gathered from a variety of sources using a range of techniques?
- Can students demonstrate and further their learning in different ways?

Making judgments

- Does the investigation provide sufficient opportunities to make judgments about student learning?
- How will the information be used as a basis for future learning and planning?

Links

- Is this investigation an appropriate part of the overall curriculum plan for the students?
- Does the investigation reflect the school's vision, philosophy and policies?
- Has this investigation been connected to:
 - prior learning
 - other investigations/units of work in the Mathematics key learning area?
 - other key learning areas?