

Leading science and mathematics at ASMS

About this Illustration of Practice

The teacher provides the context of the school, discussing the use of contemporary teaching and learning spaces and ways of teaching STEM (Science, Technology, Engineering and Mathematics). She discusses how the ASMS is able to use the 'fertile question' to teach English in an interdisciplinary science- and mathematics-based context. This is a model of how science is conducted outside of school. The students have a voice and contribute to the construction of the fertile question. The school is looking into ways for students to collect evidence of their capabilities, just as the students are aware that the teachers need to undertake and provide evidence of their own professional learning. The staff learn and innovate together through contributive leadership.



Standards

Standard 2

Know the content and how to teach it

Focus area 2.1

Content and teaching strategies of the teaching area

Lead

Descriptor: Lead initiatives within the school to evaluate and improve knowledge of content and teaching strategies and demonstrate exemplary teaching of subjects using effective, research-based learning and teaching programs.

Discussion questions

1. What strategies can you use to engage students in the design of teaching and learning programs?
2. How could interdisciplinary studies be adopted in your classroom setting?
3. How could your students independently produce evidence of their capabilities?

Learning context

The Australian Science and Mathematics School has a specific focus on science and mathematics education, while at the same time embedding other curriculum areas such as the humanities into that learning. It is located on the Flinders University campus. The teacher is the senior leader of interdisciplinary curriculum.

School context

[Australian Science and Mathematics School \(ASMS\)](#)

South Australia

Year level: Year 10 Year 11 Year 12

Related subject: Mathematics Science

Stage of schooling: Secondary

School type: Government

School location: Metropolitan

[View school location in Google Maps](#)