

# Inquiry-based Teaching

## Professional Learning Module



### Contents

Overview of the resource	1
Using the resource	2
Modelling teaching skills	3 - 5
DVD lessons	3
The activity lesson: teaching skills associated with the different phases	4 - 5
Practising inquiry-based teaching skills	6 - 7
Inquiry-based teaching strategies	8 - 11
Inquiry-based teaching	12 - 19
Which of the following are inquiry lessons?	12
What is inquiry-based teaching?	13
What are the features of inquiry-based teaching?	14
Forms of inquiry	15 - 16
Inquiry: busting the myths!	17 - 18
What research says about inquiry-based teaching	19
Stories from the classroom	20 - 24
References	25

### Overview of the resource

The essence of *Science by Doing* is that students will be engaged in interesting and stimulating science activities. Activity lessons require teachers to use a range of teaching skills if they are to be effective in helping students learn. This professional learning resource explores the different phases of an activity lesson and the teaching skills required for each phase. The four components of the resource complement one another and should be used together to ensure effectiveness of the resource.



#### **BOOKLET: Inquiry-based Teaching**

This written guide provides background information which supports the ideas and topics explored in the digital resources. Further reading lists and helpful tips and tools are included.



#### **DVD: Modelling Teaching Skills**

The DVD describes and demonstrates the phases of an activity lesson by showing two different lessons. These lessons illustrate the different teaching skills required in each phase, and in the process highlight the very nature of inquiry-based teaching, as well as some of its defining characteristics.



#### **CD-ROM: Practising Inquiry-based Teaching Skills**

The interactive digital resource provides an opportunity to practise the teaching skills associated with each phase of an activity lesson. This is done via interacting with a virtual classroom using a recording device such as a webcam. For feedback the teacher can watch the way other teachers have responded to each lesson phase. Teachers will also be prompted to reflect on their own approach to identify areas of strength and weakness. The simple act of recording is an essential feature of this resource.

#### **CD-ROM: Inquiry-based Teaching Strategies**

Using animation, this resource describes and illustrates six teaching strategies that facilitate an inquiry-based approach to teaching and learning. Following an introduction to each of the strategies, the teacher is presented with a range of classroom scenarios and the opportunity to select the strategy most appropriate to each.