"Lower order questions ask questions to recall, define and describe; that is, to provide facts. Higher-order questions require them to perform interpretive rather than descriptive tasks. They may be asked to analyse, compare, evaluate or synthesise; to rank, hypothesis, design or predict. Good questioning leans toward the open-ended and higher-order forms as much as possible" (Dawson, 1998; p28)

Types of questions

Factual or exploratory questions
probe facts and basic knowledge and allow little opportunity for dissent: "Where would you find the Gluteal muscle? "What does x equal in this equation?"

Challenge questions
examine assumptions, conclusions, and interpretations: "How else might we account for the findings of this experiment?"

Relational or comparative questions
*ask for comparisons of themes, ideas, or issues: "*What distinguishes the Wallabies from the All Blacks at the 1999 Rugby World Cup?"

Diagnostic questions
probe motives or causes: "Why do you think the manipulation should be carried out in the manner I just demonstrated rather than any other?"

Action questions
call for a conclusion or action: "In response to an occupation of the Registry, what should the Vice Chancellor do?"

Connective and causal effect questions
ask for causal relationships between ideas, actions or events: "If the university raises student fees, how will that affect enrolment levels?"

Extension questions
expand the discussion: "How does this comment relate to what you addressed in this morning's lecture?"

Hypothetical or problem-based questions
pose a change in the facts or issues: "Suppose the patient was extremely tense and nervous about the treatment s/he was about to receive, how might you remedy the situation?"

Priority or evaluative questions
seek to identify the most important issue, or make a judgement on the relative value of two points being compared: "Which should we be more concerned about: stagnating staff salaries, or rising student fees?"

Summary questions
elicit syntheses: "What themes or lessons have emerged from today's class?"

Questioning strategies (Adapted from Barrington, 1998; Davis, 1993; Dawson, 1998; Wright, 1999)

Invite answers

Don't demand, try "Could you give us some reasons for your view?" rather than "Why do you say that?".

Ask one question at a time.

If you get no response, rephrase the question. Asking another question may only confuse some students.

Avoid leading questions.

"A question such as 'Don't you all think that global warming is the most serious environmental hazard we face?' will not lead to a free-ranging discussion of threats to the environment. Similarly, avoid answering your own question: 'Why can't we use the chi-square test here? Is it because the cells are too small?'" (Davis, 1993, p. 86).

Give students plenty of time to answer.

Don't be afraid of silence – it will rarely last longer than 15 seconds, and it gives students a chance to formulate a reply. "If you communicate an air of expectation, usually someone will break the silence, if only to say 'I don't understand the question'" (Davis, 1993, p. 86).

Show that you value all answers.

This can be done by nonverbal signals (eye contact, nod, smile) as well as verbal responses.

Encourage students

to take more responsibility for *asking* questions of you, and of each other. "Be careful about how you elicit questions. Asking 'any questions?' is easily dodged by those who don't want to contribute. A skilled tutor is more likely to say, 'What are your questions?' This presumes that every student has at least one question and it is merely a matter of asking it" (Barrington, 1998, p. 10).

Answering questions

Listen carefully

to the question being asked, and take some time to think before responding.

If the question requires a lengthy answer,

or indicates that the student has missed some classes or not done the readings, encourage the student to see you outside of class hours.

Make sure everyone heard

the question. Repeat and/or paraphrase if necessary, and talk to the whole class when responding.

Clarify students' questions

by asking for an example if you don't understand.

Answer students' questions directly,

but also encourage students to try to answer their own questions.

Check back

with the student to make sure the question has been answered.

Admit

when you don't know the answer.