



Otago Medical School
Te Kura Hauora o Ōtākou



Effective Questioning

I orea te tuatara ka puta ki waho

A problem is solved by continuing to find solutions

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Who am I?

Education Advisor ELM

Dunedin-based



In what teaching situation / context do you feel most comfortable ASKING questions?

- a) Small group settings
- b) One on one
- c) Large group settings (i.e. lecture settings, more than 20 people)



Which of the following is NOT a stage of Tuckman's stages of group development?
(Answers used to allocate people to groups; please answer quickly)

a) Performing

b) Forming

c) Martini drinking



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Purpose Context Method

Which of the following is NOT a stage of Tuckman's stages of group development?

- a) Performing
- b) Forming
- c) Martini drinking



Objectives

About questions:

- Understand the purpose
- Be aware of the influence of context
- Describe techniques / methods

**EFFECTIVE
QUESTIONING**

Plan: talking, video / discussion, talking, break out room / discussion, more talking, break out OR discussion, summary

Any questions – pop them in chat (thanks Tehmina! 😊)

Teachers Novice vs. Expert

- Ask fewer questions and less likely related to assisting performance
- Ask questions to break moments of silence
- Ask questions to address an immediate problem within a task
- Ask questions occasionally to check understanding
- Tend to ask questions for their own clarification, benefit and learning



- Ask questions more frequently and related to assisting performance
- Ask questions to establish rapport or to set learner at ease
- Ask leading questions closely related to the overall goals of the activity
- Ask questions regularly to check understanding
- Ask questions to clarify a confusing task



(See if you can pick up common themes / comments)

[Apologies for low video quality] 8

What did you pick up from the students? Were there common themes?

Small group teaching

'What do you think?'

Funneling

Encourage reflection

Lecture setting

No right or wrong

Perspective v fact

Encourage debate

Experience / engagement

No bias

Openness

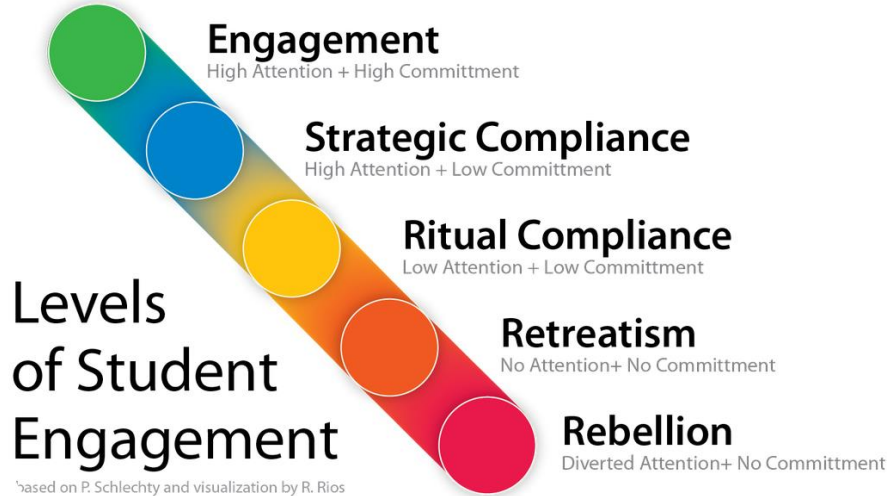
Build relationships

Positive response

Enjoyable

Not feel silly

'Engaging with students' OPD session



'Got the room' vs. 'Lost the room'

Purpose of questioning

Why do you ask students questions?

- Promote discussion
- Engagement
- Increase understanding
- Establish what they know
- Encourage deeper thought
- Clarify mis-understanding
- Stimulate curiosity
- Did they do the homework?!
- Keep awake (!)
- Communication skill
- Check on wellbeing
- Ensure patient safety
- Understand who they are
- Aid decision-making
- Keep attentive

Context of questioning

- Who is sitting in front of you?
- What is their level of learning?
- What time of day is it?
- What time of year is it?
- Where have the students just arrived from?
- What sort of location are you in?
- How is the class / space organised, physically?
- What are the objectives for the session?
- What is your timeline / plan?
- How well do you know them?
- How well do they know each other?
- What is your relationship with the group / persons?
- **ARE THEY ENGAGED?**
- **ARE YOU ENGAGED?**

Purpose, context will influence how you question in each stage



Tuckman's stages of small group development

Activity - Break out groups

'Got the room' vs. 'Lost the room'

- Large gp and small gp
'Forming' stage
- Best tools, methods, tips, tricks using questions to
'Get the room'



Introduce yourselves! Pick a spokesperson. [Take a screenshot]

Stand, stretch, move, refuel



Turn your camera off, mute your mic.
Stand up, move around.
See you in 60 seconds 😊

Method [Reflect on purpose and context]

Choose focus / emphasis:

- Knowledge dimension
- Cognitive dimension
- Type / style: shotgun, convergent, divergent, brainstorm, funnel, Socratic

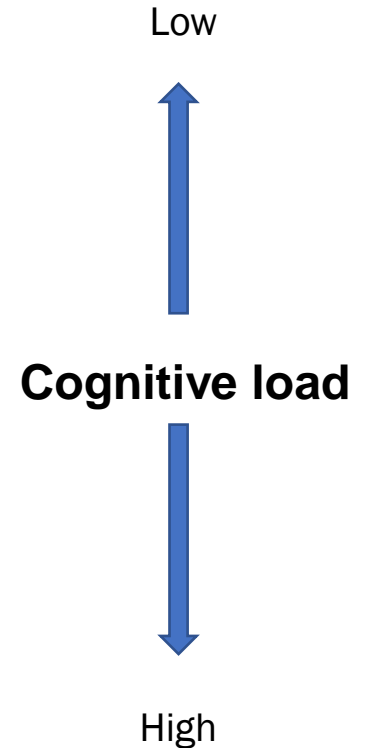
You will probably consider
all three elements

Responding: deliver appropriate response

Knowledge dimension

Level	Sample stem questions
Creating	Can you design a... to... ? Can you see a possible solution to... ? How would you test... ? [Construct, create, develop]
Evaluating	How effective are? What do you think about...? Is there a better solution to...? [Appraise, judge, defend]
Analyzing	What do you see as other possible outcomes? What is the function of...? How is... similar to...? [Classify, compare, differentiate]
Applying	How would you explain? What would result...? What was the main idea? [Demonstrate, solve, use]
Understanding	What does this mean? What seems to be the....? Can you clarify? [Restate, summarise, explain]
Remembering	Who? Where? Which one? What? How much? How many? [Define, list, recall]

Cognitive dimension



Type / style of questioning

Examples

Shotgun – several content areas, with no particular link...succinct response

What are the risks associated with this treatment? What are the best ways to communicate with patients in this situation?

Convergent – closed, narrow options

What percentage of the population are non-responders to this type of medication?

Divergent – open, many responses

This medication is not used so much as it was once. Why?

Brainstorm – generates ideas, viewpoints

If you could generate a new medication or product or intervention in these cases, what features would it have?

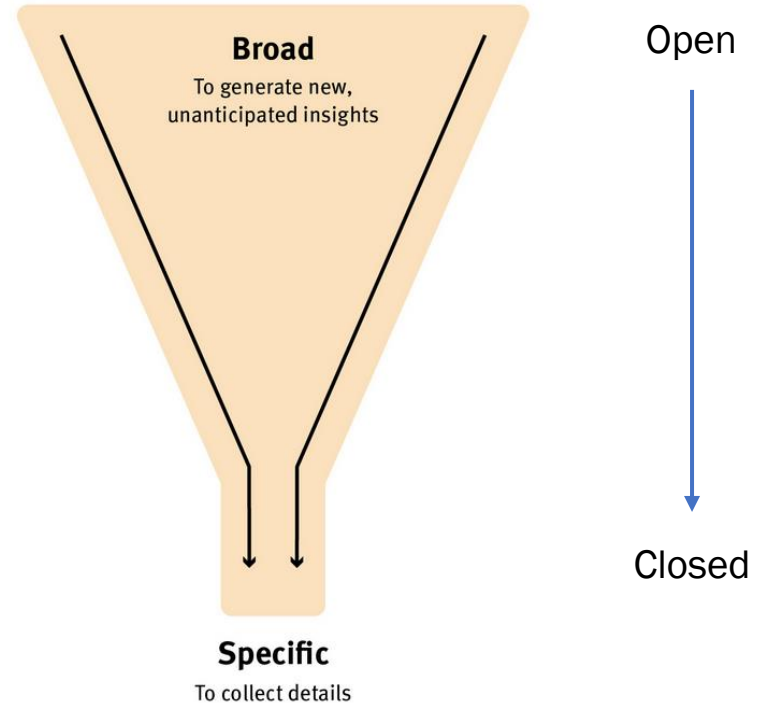
Funneling Approach

Tell me about gall stone disease (divergent / open)

Name the ways that gall stones can cause disease in patients (convergent / closed)

Explain how gall stones cause pancreatitis (process)

The Funnel Technique



Socratic questioning

‘Answer an answer with a question’

- Dialogue between teacher and learner
- Allows:
 - ❖ Clarification
 - ❖ Probing of assumptions
 - ❖ Probing reasoning
 - ❖ Differing perspectives
 - ❖ Considering consequences
- Develops deeper / higher level thinking
- Develops questioning skills



Socrates: historic ‘know it all’ and smarty pants

One of the best-known teaching tools to engage students in higher level thinking

— Activity

You are teaching a group of 12 health care professions students in a once-a-week session that lasts two hours. One mature student in the group has a degree in another health profession; they are largely uncooperative, giving the impression they are 'better' than other students. Your impression is they do not engage well with you, or other students. This means the momentum of the group is hindered and they are not forming or storming as you would have hoped, eight weeks in to the first semester.

During class, how would / could / do you use questions to improve this situation?

Purpose – you decide

Context – provided

Method – you decide

Responding to questions

- Wait time / silence (1 second? 5 seconds? 10? A minute??)
- Immediate feedback – encouragement
- Redirecting – sharing the load
- Reflecting – you are listening
- Checking understanding - “What I think you are saying is...”
- Re / para phrasing – your own words, e.g. “Ok, so you think it is an x, y, z”
- Acknowledge unknown – OK to say you don’t know
- Be genuine and human (or we could just leave it to AI 😊)

AVOID being interpreted as pimping, posturing

Objectives

About questions:

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- [Knowledge, cognition, type / style]

**EFFECTIVE
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DYK 16

Do you know...

Why questioning is an important skill

The fundamental purpose of asking questions, regardless of context, is to contribute to the overall pool of knowledge and mutual understanding. Questioning can take place in a one-to-one situation or in a group of two or more.

Why use questioning?
Questioning is helpful for learning and teachers may include a range of why they are asking questions:

- Clarifying ideas
- Encouraging challenge
- Encouraging creative thought

Your reasons for questioning your students may include:

- Engaging the student
- Testing the student
- Establishing understanding

Open questions
Open questions have no fixed answer and encourage the student to think, analyse and evaluate. They are often used to explore a topic or to encourage a student to think about a problem or situation.

Closed questions
Closed questions have a fixed answer and are often used to check understanding or to confirm a fact.

Leading questions
Leading questions have a fixed answer and are often used to guide a student towards a particular answer. A leading question is one that suggests the answer to the question.

Small questions
Small questions check understanding and are often used to confirm a fact or to check a student's understanding.

Process questions
Process questions have no fixed answer and are often used to encourage a student to think about a problem or situation.

How to use questioning effectively

- Use open questions to explore a topic or to encourage a student to think about a problem or situation.
- Use closed questions to check understanding or to confirm a fact.
- Use leading questions to guide a student towards a particular answer.
- Use small questions to check understanding.
- Use process questions to encourage a student to think about a problem or situation.

Some key questioning strategies

Open-ended questions
The way you phrase a question, the time you use and the body stance you adopt all influence how a student interprets a question. Allow students time to get a question wrong about failure or eye rolling.

Formulating the question
It is easy to ask a closed, low-level recall question. Try to formulate more meaning through open, high-level process questions. When phrasing your questions, think about the why, what, how.

Active questions
Closed questions become a dominant form of negative feedback. If a student doesn't know something it is not a bad thing and the student should be made to feel small because of it. Instead, make it one added to your questioning.

Thank you!

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Did you notice....

- First questions were Y / N or similar
- First group comments / feedback were focused on observations
- Next comments / feedback were around experience, opinion

Scaffolding, increasing engagement, creating safe environment

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