Quality Questions

Purpose:
To improve your questioning strategies so that you gain better oral feedback from students about their learning.

30 000 questions a year?
That's one estimate of how many questions a teacher asks. Amazing!
How many is that per hour? Questions are one of the simplest and best ways of gaining feedback from students in order to change teaching and learning actions.
We could all do with some work on improving our questioning technique, couldn't we?
(Oops: just a rhetorical question!) 'Wait time' is a big factor in giving students thinking time, and changing the way we ask questions (and expect answers) is, too.
e.g. “No hands up”? Why? This activity responds to these issues.

What you need:
• a colleague to pair up with for peer observation of questioning
• 1 copy of pages 1 & 2 (back-to-back) per teacher
• 1 separate copy of page 3 for each teacher - for the observation.

Step 1:
• READ "Notes on Quality Questions" (page 2). Any surprises?

Step 2:
• PAIR up with a colleague and plan when to observe each other's classes.
• Jointly PLAN which aspects you will focus on in the observation (see page 3).
• OBSERVE and RECORD data on the “QQ Observation” sheet (page 3). It is called this for discrete use in class. Try to observe at least 30 minutes on more than one day and in more than one curriculum area (primary) or class (secondary).

Step 3:
• FEEDBACK to your colleague the data from the monitoring.
• ANALYSE the observations together to focus on where you could each improve.

Step 4:
• After some time trying to improve your questioning,
  REPEAT THE OBSERVATIONS and discussions of the new data, compared with the first observation.
• ASK questions like: What has changed? Do students notice a difference?
  Do you? How have you been able to use the feedback gained through questioning to change your students’ learning? Are your students asking better questions, too?

Office of Learning and Teaching, DE&T
Notes on Quality Questions

Why ask questions? To promote thinking, to initiate reflection, to prompt metacognitive thinking, to generate ideas, to identify gaps in learning, to invite deeper thinking and many more reasons.

1. **Wait time:** try to increase this to at least 3-seconds before you call on a student, react to a response or encourage another student to answer. (Think: “one thousand, two thousand, three thousand”.). This will have the effect of students being more tentative, hypothetical and extensive in their responses, providing you with more information about their thinking processes and their learning progress.

2. **“No hands-up”:** any person can be called on for any question, not only volunteers. This means that all students need thinking time (i.e. a wait time from you after students hear the question - and then another wait time after their response, while you wait for elaboration or qualification or …).

3. **Open questions:** try more open-ended, creative or divergent-thinking questions, where there is no clear right/wrong answer, and where more speculative and hypothetical responses are encouraged.

4. **Challenging “higher order” questions:** try to ask more “big picture” and problem-solving questions. Prepare sample questions, as it is hard to think of challenging questions “on your feet”.

<table>
<thead>
<tr>
<th>Revised Bloom</th>
<th>Sample verbs for questions (and for learning goals)</th>
</tr>
</thead>
<tbody>
<tr>
<td>remember</td>
<td>tell, recall, state, recognise, name, select, reply, write, identify, describe, list, give, find</td>
</tr>
<tr>
<td>understand</td>
<td>define, explain, distinguish, report, outline, locate, predict, review, translate, discuss</td>
</tr>
<tr>
<td>apply</td>
<td>apply, practise, use, calculate, demonstrate, illustrate, dramatise, interpret, show, sort</td>
</tr>
<tr>
<td>analyse</td>
<td>analyse, investigate, contrast, compare, question, separate, relate, estimate, adapt</td>
</tr>
<tr>
<td>evaluate</td>
<td>judge, decide, rate, verify, evaluate, rank, argue, predict, choose, justify, prioritise</td>
</tr>
<tr>
<td>create</td>
<td>compose, improve, design, suggest, construct, propose, synthesise, build, generate, devise, invent, create, formulate, imagine</td>
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The revised Bloom “understand” is still a low level view of understanding (i.e. comprehending) compared with deep understanding (see Activity 2-1B). Deep understanding requires transfer to new contexts, seeing things from another point of view, being aware of your own preconceptions and prejudices, using the knowledge in combination with other ideas to transform ideas, being sceptical and so on. How could you formulate questions to promote deep understanding?

5. **Variety of question types:**
   - **Inquiry questions:** What if …? Whose perspective …? In what ways …? Which circumstances …?
   - **Metacognitive questions:** What options could you try? How will you know if your idea works?
   - **Probing questions:** Asking students to read on the lines (give literal meanings), and then go further, by reading between the lines (implied meanings) and beyond the lines (speculate on meanings).
   - **Process questions:** How did you reach that conclusion? Why did you do it that way?
   - **Reflective questions:** If you were to …? How could you have …? In advising someone else …?
   - **Rhetorical questions:** You are not expecting an answer and you won’t get one. Not usually useful.

6. **Gender questions:** Try to avoid asking girls low order recall questions and boys high order questions. Do spread questions evenly around the room, among all students - either when asking questions “from the front” or when working “between the tables”. Teachers tend to ask more questions of boys, and higher order questions, too. Also some students, often girls, do not like the public asking of questions - they have been put down and humiliated in this setting before and are reluctant responders. In that case you might find it better to ask more questions as you circulate among groups.

7. **Elaboration,** clarification or extension of student responses can be invited by you or by a student. Develop a culture of a “community of inquiry” in your classroom - where asking questions is valued along with answering them, and the teacher is not the only question-asker. Your classroom climate is open, friendly and supportive, where students are not blasted with questions, and ‘hands-up’ does not occur. The atmosphere is exploratory, where students encourage each other’s thinking, sharing preliminary ideas, challenging each other through questions, and piggy-backing on ideas.

8. **Remember to listen!**
### QQ Observation

**Teacher:** ......................  **Observer:** ......................  **Date:** ..............

**Class:** ......................  **Topic:** ........................

Note: you may find it helpful to initially PRE-PLAN some challenging, open-ended questions.

<table>
<thead>
<tr>
<th>Questioning facet</th>
<th>Data/evidence of monitoring</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Wait-time: 3-seconds plus, before directing to a student &amp; after a response</td>
<td></td>
<td></td>
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<tr>
<td>2. &quot;No hands up&quot;: all students expect, &amp; are expected, to respond</td>
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<td></td>
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<tr>
<td>3. Open questions: creative, divergent, speculative, hypothetical</td>
<td>Open:</td>
<td>Closed:</td>
</tr>
<tr>
<td>4. Challenging higher order questions: analyse, evaluate, create, empathise</td>
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<tr>
<td>5. Variety of types: clarifying, inquiry, probing, process, metacognitive, reflective</td>
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<td>6. Gender-spread of questions: asked of, or by, both sexes (higher order &amp; frequency)</td>
<td>Girls:</td>
<td>Boys:</td>
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<tr>
<td>7. Invite elaboration: exploration, community of inquiry</td>
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<td>8. Teacher listens: hears, reflects back, pauses... &amp; provides quiet thinking time.</td>
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