workshop  02  FOCUS ON LEARNING  EFFECTIVE QUESTIONING
Note to facilitators

What is the aim of this booklet?
This is part of a set of four booklets aimed at developing assessment practice for teachers in Ireland. Although it is primarily for teachers involved in junior cycle developments, the material and approaches can be used across all sectors. The set of booklets and associated materials are intended to be used in a flexible way to allow teachers to explore a range of approaches which will enable them to develop a coherent approach to assessment.

How is the booklet to be used?
Schools may choose to use and adapt the material in any way to suit their own context. It is recommended that you start with the slide presentation. You may also find it helpful to follow the steps outlined below or you may develop your own workshop plan. These resources are aimed at facilitating both whole staff discussion and subject-based discussion. Where possible, we would encourage using the material on a school-wide basis as research evidence indicates that changes in assessment practice are more likely to become embedded if they are introduced on a systematic basis across a whole school.

If you are planning to facilitate a workshop with staff please consult the Facilitator’s Guide which can be downloaded at www.juniorcycle.ie/assessment.

Step 1
The slide presentation can be used to introduce effective questioning to a whole staff group. The final slide in the presentation contains some prompts for staff discussion based on the main messages of the presentation.

Step 2
Following this presentation it is recommended that staff are provided with the opportunity to view the short video of Paul Black talking about effective questioning.

Prompt questions for staff discussion:
In the video Professor Paul Black makes a number of statements about effective questioning. Discuss how close these statements are to your own practice:

*It’s about how you prepare, you get something worth asking to start a discussion.*

*The purpose of the question is to start a discussion. It’s not about the right answer.*

*In the discussion teachers can learn something about where the pupils are coming from ... what ideas they already have and build on them ... rather than start with something that doesn’t connect with their thinking.*

What are the main challenges and benefits of introducing effective questioning practice in your classroom?
Step 3
Following on from these discussions you can now explore the workshop materials in this booklet. These activities can be approached and undertaken in any order that suits the school context. It is not necessary or intended for the activities to be approached in the sequence presented in the booklet.

Step 4
Print off the witness statement cards, discussion cards and posters. The cards can be used to stimulate further discussion and thinking. The posters can be displayed around the room to reinforce the key messages and to help staff to further develop their practice in this area.

Encourage staff to engage with the material included in the recommended reading section.

‘I really started to think about the type of questions I was asking – were they just instant one word answers, what were they testing – knowledge or understanding, was I giving the class enough time to answer the question, was I quickly accepting the correct answer, was I asking the students to explain the answer, how was I dealing with the wrong answer? When I really stopped to think, I realised that I could make a very large difference to the girls’ learning by using all their questions and answers to govern the pace and content of the lesson.’

Gwen, teacher
Activity 1

How are we doing?

Reflect on how you use questions in your classroom using the table below.

Traffic light your responses to the questions below using this code:

<table>
<thead>
<tr>
<th>Always</th>
<th>Sometimes</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>🟠</td>
<td>⬤</td>
<td>⬜</td>
</tr>
<tr>
<td>⬜</td>
<td>⬤</td>
<td>🟥</td>
</tr>
</tbody>
</table>

I think about the questions I am going to ask in class and plan one or two really good questions per lesson.

I ask questions that challenge and engage the students.

Before teaching a new topic I use questions to assess the students’ prior knowledge and understanding.

I ask questions that force students to use existing knowledge or understanding to create new understanding.

I ask questions to encourage creative and critical thinking.

I try to avoid asking too many closed questions.

I allow time for thinking after a question is asked in class.

Take a few minutes to share your reflections with a colleague.
What has questioning got to do with assessment?

The *Framework for Junior Cycle* states that assessment will focus on supporting learning. In order to support learning we need to know what students are thinking.

Research suggests (Mason. J., Watson. A.) that if we know what children are thinking we can find out a lot about how and what they are learning. To do this we need to ask questions that

- interest, challenge or engage
- assess prior knowledge and understanding
- mobilise existing understanding to create new understanding
- focus thinking on key concepts
- extend and deepen learners’ thinking
- promote learners’ thinking about the way they learn.

Learning is best supported by **effective questioning**.

The table below summarises research findings and suggests the characteristics of effective and ineffective questioning. The goal of this workshop is to help you ask more effective questions so that you can support learning in your classroom.

<table>
<thead>
<tr>
<th>Ineffective question are</th>
<th>Effective questions are</th>
</tr>
</thead>
<tbody>
<tr>
<td>unplanned with no apparent purpose</td>
<td>planned and related to the lesson learning intentions</td>
</tr>
<tr>
<td>mainly closed</td>
<td>mainly open</td>
</tr>
<tr>
<td>not accompanied by wait time</td>
<td>accompanied by wait time</td>
</tr>
<tr>
<td>‘Guess what is in my head’ type questions</td>
<td>ones where the teacher allows collaboration before answering</td>
</tr>
<tr>
<td>poorly sequenced</td>
<td>carefully graded in difficulty</td>
</tr>
<tr>
<td>where the teacher accepts just the answer</td>
<td>where the teacher encourages learners to explain and justify answers</td>
</tr>
<tr>
<td>where only a few students participate</td>
<td>where all students participate e.g. using mini-whiteboards, or questioning each other</td>
</tr>
<tr>
<td>where incorrect answers are ignored</td>
<td>where both correct and incorrect answers are followed up</td>
</tr>
<tr>
<td>all asked by the teacher</td>
<td>asked by students too</td>
</tr>
</tbody>
</table>
Activity 2

Making questioning more effective

When planning effective questioning it helps to focus on why you are asking the question in the first place. The chart below shows some of the many purposes for asking questions in a classroom.

<table>
<thead>
<tr>
<th>Purpose of question</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>To prompt students to reflect on their conceptual</td>
<td>• What is the most important idea from today’s discussion?</td>
</tr>
<tr>
<td>understanding</td>
<td>• Can you explain this concept in your own words?</td>
</tr>
<tr>
<td></td>
<td>• Replace ‘Do you understand?’ with ‘Give me an example so I know you understand.’</td>
</tr>
<tr>
<td>To ask a student to clarify a vague comment</td>
<td>• Could you say a bit more on that point?</td>
</tr>
<tr>
<td></td>
<td>• Can explain a little more?</td>
</tr>
<tr>
<td>To prompt students to explore attitudes, values, feelings</td>
<td>• What are the values or beliefs that inform this argument?</td>
</tr>
<tr>
<td></td>
<td>• What has influenced how you feel/what you believe about this topic?</td>
</tr>
<tr>
<td>To prompt students to see a concept from another</td>
<td>• How do you think that this issue might be viewed by those with whom you disagree?</td>
</tr>
<tr>
<td>perspective</td>
<td>• Imagine how this might apply to another situation or problem?</td>
</tr>
<tr>
<td>To prompt students to support their assertions and</td>
<td>• How do you know that?</td>
</tr>
<tr>
<td>interpretations</td>
<td>• What has led you to that conclusion?</td>
</tr>
<tr>
<td></td>
<td>• Where is the evidence? Is it reliable?</td>
</tr>
<tr>
<td>To prompt students to respond to one another</td>
<td>• What do you think about the idea just presented by your classmate?</td>
</tr>
<tr>
<td></td>
<td>• Do you agree or do you see the issue differently? Explain.</td>
</tr>
<tr>
<td>To extend and deepen students thinking</td>
<td>• What are the assumptions that informed your thinking?</td>
</tr>
<tr>
<td></td>
<td>• What/who influenced your thinking?</td>
</tr>
<tr>
<td>To ask students to predict possible outcomes</td>
<td>• What might happen if...</td>
</tr>
<tr>
<td></td>
<td>• What are some possible consequences of...?</td>
</tr>
<tr>
<td></td>
<td>• What would be the result if a different set of assumptions were used to set up this experiment?</td>
</tr>
<tr>
<td>To prompt students to connect and organise information</td>
<td>• How does this shed light on the concept we studied last week?</td>
</tr>
<tr>
<td></td>
<td>• Can you develop a graph or table that organises this information in a helpful way?</td>
</tr>
<tr>
<td>To ask students to apply a principle or formula</td>
<td>• How does this principle apply to this situation?</td>
</tr>
<tr>
<td></td>
<td>• Who can suggest how we might use this new formula to solve the problem we examined earlier?</td>
</tr>
<tr>
<td>To ask students to illustrate a concept with an example</td>
<td>• Can you think of an example of this, drawn from your experience?</td>
</tr>
<tr>
<td></td>
<td>• Can you point to a specific part of the novel that shows this theme?</td>
</tr>
<tr>
<td></td>
<td>• Can you identify a painting or design that exemplifies that idea?</td>
</tr>
</tbody>
</table>

You may like to work in your subject groups for this activity. Firstly, decide on a purpose for your question, then create an effective question. Finally discuss the type of learning the question will promote in a classroom. You may find the witness statement cards 1-3 useful as they provide examples from other teachers working to improve their classroom questioning.
**Activity 3**

**Using Bloom's Taxonomy to support questioning**

Consider how you could use and adapt these question stems to help you vary the types of questions you ask in class.

**Critical Thinking Skills**

<table>
<thead>
<tr>
<th><strong>1</strong></th>
<th><strong>Knowledge</strong></th>
<th><strong>2</strong></th>
<th><strong>Comprehension</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Identification and recall of information</strong></td>
<td><strong>Who</strong></td>
<td><strong>How</strong></td>
<td><strong>convert</strong></td>
</tr>
<tr>
<td><strong>Knowledge</strong></td>
<td><strong>What</strong></td>
<td><strong>Describe</strong></td>
<td><strong>describe</strong></td>
</tr>
<tr>
<td><strong>Where</strong></td>
<td><strong>What is</strong></td>
<td><strong>explain</strong></td>
<td><strong>explain</strong></td>
</tr>
<tr>
<td><strong>When</strong></td>
<td><strong>What would you predict/infer from</strong></td>
<td><strong>put In order</strong></td>
<td><strong>put In order</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>3</strong></th>
<th><strong>Application</strong></th>
<th><strong>4</strong></th>
<th><strong>Analysis</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Use of facts rules and principles</strong></td>
<td><strong>How is</strong></td>
<td><strong>What are the parts or features of</strong></td>
<td><strong>What would you predict/infer from</strong></td>
</tr>
<tr>
<td><strong>Application</strong></td>
<td><strong>an example of</strong></td>
<td><strong>Classify</strong></td>
<td><strong>What would you predict/infer from</strong></td>
</tr>
<tr>
<td></td>
<td><strong>related to</strong></td>
<td><strong>according to</strong></td>
<td><strong>What would you predict/infer from</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Why is</strong></td>
<td><strong>most important?</strong></td>
<td><strong>What might happen if you</strong></td>
</tr>
<tr>
<td></td>
<td><strong>significant?</strong></td>
<td></td>
<td><strong>combined</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>5</strong></th>
<th><strong>Synthesis</strong></th>
<th><strong>6</strong></th>
<th><strong>evaluation</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Combining ideas to form a new whole</strong></td>
<td><strong>What would you predict/infer from</strong></td>
<td><strong>Do you agree that</strong></td>
<td><strong>appraise</strong></td>
</tr>
<tr>
<td></td>
<td><strong>What ideas can you add to</strong></td>
<td><strong>What do you think about</strong></td>
<td><strong>choose</strong></td>
</tr>
<tr>
<td></td>
<td><strong>How would you create/design a new</strong></td>
<td><strong>What is most important?</strong></td>
<td><strong>compare</strong></td>
</tr>
</tbody>
</table>


For more ideas on how to link Bloom's taxonomy to classroom questioning and assessment approaches go to http://www.bloomstaxonomy.org/Blooms%20Taxonomy%20questions.pdf
## Activity 4

### Encouraging students to become better questioners

Warren Berger suggests that working within an answers-based education system, teachers must go out of their way to create conditions conducive to questioning. He offers some suggestions on how to encourage more questioning in the classroom and hopefully, beyond it. Consider these and then think about other ideas you could add related to your subject.

<table>
<thead>
<tr>
<th>Make it safe</th>
<th>One idea...</th>
<th>Other ideas...</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asking a question can be a scary so teachers must somehow “flip the script” by creating an environment where questioning becomes a strength; where it is welcomed and desired.</td>
<td>Organise tasks dedicated entirely to formulating questions (no answers allowed!) with clear rules and guidelines to ensure that students’ questions aren’t judged or edited, and that all questions are written down and respected. For example, in small groups invite students to come up with 10 great questions about a topic during a 10-minute span.</td>
<td></td>
</tr>
<tr>
<td>Model the process</td>
<td>Let the students hear you as you formulate and work through questions out loud thus making explicit your thought processes. For example, a teacher might say ‘Let’s think this through together’ or ‘I’m wondering what if...’ or ‘Who was the best leader?... I’m thinking I need to be clear what I mean by ‘best’ before I can find an answer’.</td>
<td></td>
</tr>
<tr>
<td>Make it fun</td>
<td>Here are some ways of injecting an element of play in questioning:</td>
<td></td>
</tr>
<tr>
<td>Introduce a ‘game’ element into questioning</td>
<td>Can you turn that answer/statement into a question? Can you open your closed questions, and close your open ones?</td>
<td>Play 20 questions.</td>
</tr>
<tr>
<td>Make it rewarding</td>
<td>Create a space in the classroom where students’ great questions are displayed. Or have a question of the day/week.</td>
<td></td>
</tr>
<tr>
<td>Make it stick</td>
<td>Include a metacognitive stage in question-training exercises wherein students can reflect on how they’ve used questioning and articulate what they’ve learned about it.</td>
<td></td>
</tr>
</tbody>
</table>

Credit: Adapted from [http://www.edutopia.org/blog/help-students-become-better-questioners-warren-berger](http://www.edutopia.org/blog/help-students-become-better-questioners-warren-berger)
Planning for effective questioning

| Plan how you will arrange the room and the resources needed | Arrange students so that they can see and hear one another as well as the teacher. You may need to rearrange chairs in a U shape or the students could move and ‘perch’ closer together. Or maybe you will move to the back of the room so that the question is the focus of attention and not the teacher. |
| Plan how you will introduce the questioning session | Silence will be hard for you to bear in the classroom but the students may find it confusing or even threatening. Explain why there will be times of quiet. |
| Plan how you will establish the ground rules | If you are using ‘No hands up’ then you will need to explain this to the students. Some teachers have had to ask their students to sit on their hands so that they remember not to put their hands up. The students will be allowed to put their hands up to ask a question, so if a hand shoots up remember to ask them what question they would like to ask. The students may also be used to giving short answers so you could introduce a minimum length rule e.g. ‘your answer must be five words in length as a minimum’ |
| Plan the first question that you will use | Plan the first question and think about how you will continue. You cannot plan this exactly as it will depend on the answers that the students give but you might, for example, plan |
|  | • to take one answer and then ask others what they think about the reasoning given |
|  | • to take two or three answers without comment then ask the next person to say what is similar or different about those answers |
| Plan how you will give thinking time | • Will you allow 3-5 seconds between asking a question and expecting an answer? |
|  | • Will you ask the students to think – pair – share, giving 30 seconds for talking to a partner before offering an idea in whole class discussion? |
|  | • Will you use another strategy that allows the students time to think? |
| Plan how and when you will intervene | Will you need to intervene at some point to refocus students’ attention or discuss different strategies they are using? Have one or two questions ready to ask part way through the lesson to check on their progress and their learning. |

Credit: This handout was created as part of the FaSMEd Project by the Centre for Research in Mathematics Education, University of Nottingham 2014
Planning our Next Steps

This workshop will hopefully have helped you develop your thinking about how you can ask more effective questions in your classroom.

You are now asked to identify a couple of areas where you would like to improve your practice in asking effective questions. You are advised to start in a small, focused way. You should plan the change in practice perhaps with one class in the first instance. Many teachers find that it is useful to discuss their experience of effective questioning with other teachers and keep a log of any difficulties that they encounter. It will also be important to share with your students why you are changing your practice and how it will benefit their learning. Some teachers have also found it helpful to discuss the changes with parents.

Use the planning sheet attached to set out how you intend to improve the effectiveness of your questioning in your classroom over the next 3 months. In the last column reflect on the impact of your improved questioning technique on the learning in your classroom using the 3 headings

- What surprised me about my students response
- What I did
- How it influenced my practice

You may find witness statement cards 4-5 useful as they represent stories from other teachers reflecting on the impact of their classroom questioning.

What’s in a question, you ask?
Everything. It is a way of evoking stimulating response or stultifying inquiry. It is, in essence, the very core of teaching.

John Dewey
Planning Next Steps: Planning Sheet

<table>
<thead>
<tr>
<th>Timescale/Class</th>
<th>Main area for development</th>
<th>Observations/Reflections</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Questions to consider in a subject planning meeting

A school may decide to focus on assessment as its third area for SSE. In particular, it could decide to focus on formative assessment. The following questions would be useful prompts to help gather evidence at subject department level about current practice in relation to formative assessment. The results of the deliberations on such questions could feed into whole staff discussion and ultimately help the school identify its strengths and areas for development in relation to formative assessment which should then inform the school improvement plan.

To what extent do I/we plan for effective questioning?
Do I/we plan key questions that are
• linked to the learning intentions?
• carefully graded in difficulty?
• mainly open?

How can I/ we create a classroom culture where all students participate in answering effective questions?
Do I/we
• encourage no hands up?
• allow wait time?
• involve the whole class?
• allow for collaboration before answering?
• follow up all answers even those that are incorrect?
• encourage students to explain the reasons for their answers?

How can we share examples of effective questioning with each other?

How can we use effective questions as part of peer and self-reflection?

How can we assess the impact of our questioning on student learning?

See School Self Evaluation Guidelines for Post Primary Schools p.44-45
Witness Statement Cards

These witness statement cards are accounts from teachers who tried to make their classroom questions more effective.

**Witness Statement 1**

I teach History and my first year class were learning about monastery life in Ireland. The key learning intentions were that students would be able to

- use information from many sources to understand monastic life in 12th century Ireland
- show creativity in describing life at that time

I set them this task – Write a letter imagining you are a monk in a monastery in Ireland in 12th century Ireland, describing what life is like. However, I noticed that the students simply took large chunks of information from their text books and changed it into the first person and so the task wasn’t really extending or deepening their thinking.

So I decided to follow up this task with a set of questions – Students worked in pairs to discuss these questions:

- What aspect of a monk’s life would you like?
- What part of his life would you want to change? Discuss how you would go about making this change?
- If you could interview a monk who lived at this time what questions would you want to ask him? (Think beyond what you already know or have read in your textbook.)

Then for homework students select a question which interests them and research the answer.

*Annemarie, History Teacher*

**Witness Statement 2**

I teach Science and my second year class had recently studied Photosynthesis and we then moved onto Ecology. We were about to explore adaptation of living things. I wanted to look at ways of using a ‘big question’ as a way of setting the scene for a lesson and to prompt them to connect and organise information.

The learning intentions for the lesson were that students should be able to:

- compare and contrast different types of plants and describe how the plants adapt to their environment by utilizing different types of photosynthesis.
- understand that living things are affected by their environment and respond to changes that occur in that environment
- pose a testable hypothesis

Since the students had previously learned about photosynthesis I set this open-ended, challenging question to encourage my students to think about what they already knew:

*If plants need sunlight to make food, how come the biggest plants don’t grow in deserts, where it’s sunny all the time?*

*Philip, Science teacher*
**Witness Statement 3**

I’m a Maths teacher and I wanted to get my first years to **illustrate a concept (multiplication) with an example**

The key learning intentions were that students would be able to

- understand the operation of multiplication
- represent multiplication in a diagram
- solve a multiplication problem in more than one way

This is the question I set:

*Solve the following problem in 2 ways include a diagram with one of your methods* 37 x 42

---

**Witness Statement 4**

I’m an English teacher and I wanted to focus on questions that prompt students to **support their assertions and interpretations**

**What I noticed:** When I first started asking students ‘how do you know that?’ I noticed that they found it difficult to give me answers that were related to the text we were reading. For instance, on one occasion we were reading war poetry and when I asked ‘what mood do you think the author wanted to convey?’, one student said ‘sadness’ and when I asked ‘how do you know that?’, he said ‘because war is sad’, and when I delved more I saw that his answer was related to his understanding of war as opposed to the text we were reading. When I involved others in the questioning I realised that the majority were answering in a similar way and their thinking was not related to the text at all. This was a real eye-opener to me.

**How this influenced my practice:** Now, in all my classes I make sure that students justify their answers referring to a text. I always look for students to give me evidence and justifications to their answers. This has made me ask questions that prompt students to use evidence to support their opinions and interpretations. Now because they have to explain their answers orally, this has carried through to their written work and they set out their answers fully without being prompted.

*Kevin, English teacher*
I decided that I wanted to ask questions that **direct students to respond to one another**, because usually I respond to all the answers that students give to my questions.

**What I noticed:** I would always look around and bring at least 3 people into the questioning process. I’d say things like ‘John, what do you think about Mary’s comment? Would you agree with her?’ At first they would snigger and say things like ‘Yeah I agree’ and I would say ‘Why do you agree?’ Or sometimes I’d say things like ‘Can anyone paraphrase what John is saying?’ Eventually they settled and started really engaging in discussion. I would jot down the names of people I’d asked so I wasn’t always asking the same people.

**What surprised me about the students’ response:** My students definitely began to pay more attention as they realised that they could be dragged into the questioning but my biggest surprise was that they started to ask me more questions as if they felt ‘Hey I better work out what’s going on she might ask me a question’.

I suppose what really surprised me was that previously they didn’t really have an opinion and would always assume that whoever answered the question was right. It took a while to get people to have an opinion.

**How this influenced my practice:** Questioning like this really made me realise that it is all about finding out what the students know and adjusting my lessons accordingly. I can cover everything I like but if the students aren’t understanding and engaging as I go along then I’m wasting my time. Now I am continuously checking in with students to see what exactly are they understanding.

*Máire: History and Geography Teacher*
Discussion Cards

The discussion cards can be cut out and used to stimulate small group discussion as part of a whole-staff meeting or a subject planning meeting.

**Discussion Card 1**

Think, pair and share works like this…

- The teacher poses a question and allows thinking time.
- Students formulate an individual answer.
- Students share the answer with a partner.
- They listen carefully to each other’s answer.
- Then they create a new answer that is better than the initial attempts by building on each other’s ideas.

Square (an extension of think, pair, share)

After students have done a think, pair and share then they can join another pair to form a square. This allows them build an even better answer by building on both pairs’ initial response.

Discuss how you might use or adapt this idea in your classroom.

**Discussion Card 2**

Keep the question going

Often, teachers are tempted to go from questioning to evaluation before the discussion has had full impact on students’ learning. Often this rush to closure comes from a desire to move on and cover more ground. However, there is a lot of evidence to suggest that children learn best through opportunities to explore questions in greater depth. By slowing things down, questions can provide a great opportunity to get lots of children thinking, and to monitor learning as it is happening.

Ask one student a question and ask another if the answer seems right. Then ask a third student for an explanation of why it seems so. Instead of responding with, ‘Are you sure?’, explore an answer by saying ‘Could you say a bit more about that?’. This is less threatening than the more inquisitive, ‘What do you mean by that?’.

Discuss how you might use or adapt this approach in your classroom.
You may be familiar with the strategy of putting a student in a Hot Seat, taking the role of a character from fiction or from history, or of a person from another part of the world or facing a particular challenge. The class must think of questions to ask the character and the occupant of the Hot Seat answers the questions from the character’s perspective. For younger students, it is best if the teacher models being the person in the Hot Seat until the students are familiar with how it works. There are a few variations on this such as preparing questions in advance, or organising a panel discussion with several guests in the Hot Seat or seats. All of these work to get the students questioning and thinking from different perspectives.

Discuss how you might use or adapt this idea in your classroom.

---

This methodology can be used to enable students to generate and extend ideas, to become more flexible in their thinking and to look for alternative answers rather than just settling for the first answer that comes up.

Materials needed: Copy of a text with a set of questions and a set of role cards per group.

01. Assign students to groups (3 or 4) with roles as follows:

   **Reader:** Reads the text aloud to the group.

   **Checker for understanding:** Reads the questions to make sure that all group members understand how to answer each question.

   **Recorder:** Records 3 or more good answers to each question and circles the one the group likes best. Makes sure that the group members agree with the one that is circled.

   **Reporter:** Reports back on behalf of the group to the class.

02. Explain the task: each group is to read the text, create at least 3 good answers to each question and then agree the best one.

03. When the groups are finished they can compare answers with a nearby group, or the teacher can take feedback from the reporter or ask random students from each group to explain their group’s answers.

(Adapted from Johnson, Johnson & Holubec, Advanced Cooperative Learning, p. 13:20)

Discuss how you might use or adapt this idea in your classroom.
Giving ‘wait time’

We have all had that eureka moment when we have figured something out for ourselves, but as teachers do we deny some students that moment by asking for an immediate answer or by rephrasing the question too quickly. Giving sufficient time for students to formulate an attempt at an answer is very important. Research has found that increasing the ‘wait time’ leads to:

- longer answers
- failure to respond decreases
- responses are more confident
- students challenge and/or improve the answers of other students
- more alternative explanations are offered

The ‘no hands rule’

We all have been in talks where the facilitator asks a question and we wait until an eager person puts up their hand and we can relax. The same is true of our students. They tend to stop thinking when a few in the class put up their hands. If we use the ‘no hands’ rule, we encourage all students to think about the answer to the question, as the teacher can choose anyone to answer.

Discuss - If you already use ‘wait time’ and the ‘no hands rule’ in your classroom, what do you see as the benefits? If you haven’t tried this, what do you think might be the benefits or challenges?

Get students to consider possible responses

If you’re using questions to check up on how students’ are developing their understanding, you can sometimes alter the normal sequence of teacher asks, student answers and teacher evaluates.

Instead of conducting this kind of question and answer session, try to collect some responses to questions without reacting to them. Then have students pair up, or work in groups to evaluate the responses. By doing this, you can reduce your students’ tendency to supply the right answer without thinking too much about it, perhaps because they want to please you or even to get you off their backs! You’ll ask fewer questions, but the ones you do ask will be thought-provoking and illuminating.

Use students’ responses, especially incorrect ones

Incorrect answers present a valuable opportunity to check and develop a student’s understanding. Don’t just rush to a judgement or give the correct answer. Try to avoid using the word ‘no’ in responding to an incorrect answer. Instead use a range of checking questions: Are you sure? Can you say a little more about that? Why do you think that? Who agrees with this answer? Did anyone get a different answer? What should the answer be, do you think? The aim should be to correct the error by discussion.

Discuss how you might use or adapt this idea in your classroom.
Posters

The following pages contain posters that can be used as part of a workshop to reinforce the activities in this booklet.
7 Steps to Effective Questioning

01 Create a classroom climate in which questioning is encouraged. This means encouraging student questions and creating a space where it's okay to offer divergent responses. Then all answers, right or wrong, can be used to develop understanding.

02 Use the 'no hands' rule. When hands are waving it stops thinking. If you use the 'no hands' rule everyone is enabled to think about the answer.

03 Plan your questions. If you plan your questions before class it will help make the questions more focused. Stop asking rhetorical questions or questions that you answer yourself.

04 Ask fewer questions. Ask questions that are worth asking. Ask yourself would the students be any worse off if I didn’t ask this question?

05 Raise the quality of your questions. Consider the purpose of your question. If you want to check their knowledge, then ask a closed question (i.e. a question with a right answer). If you want to probe their understanding or prompt thinking, then ask an open question.

06 Allow 'wait time'. Allow sufficient time for students to think and formulate an answer before taking responses. This means waiting several seconds.

07 Avoid shotgun questioning. This quick-fire approach to questioning can be useful in the context of a table quiz but when used by the teacher at the top of the class it can put students into a panic zone which shuts down their thinking.
Research shows that increasing the time between asking a question and taking answers to just three seconds or more leads to...

- More responses from less able students
- Fewer ‘don’t knows’
- More thoughtful and creative responses
- More follow-on questions from students
- More responses from less able students
- Students challenge and/or improve the answers of other students
- Responses are more confident
- Longer answers from students
- More students with answers

Just wait 3 seconds
Open questions, open minds

Closed questions imply that the teacher has a predetermined correct response in mind.

Open questions permit a range of responses and solicit opinion.
Glossary

Learning Outcomes
Learning outcomes are statements in curriculum specifications to describe the understanding, skills and values students should be able to demonstrate after a period of learning.

Learning Intentions
A learning intention for a lesson or series of lessons is a statement, created by the teacher, that describes clearly what the teacher wants the students to know, understand, and be able to do as a result of learning and teaching activities.

Success Criteria
Success criteria are linked to learning intentions. They are developed by the teacher and/or the student and describe what success looks like. They help the teacher and student to make judgements about the quality of student learning.

Ongoing Assessment
As part of their classroom work, students engage in assessment activities that can be either formative or summative in nature. Teachers assess as part of their daily practice by observing and listening as students carry out tasks, by looking at what they write and make, and by considering how they respond to, frame and ask questions. Teachers use this assessment information to help students plan the next steps in their learning. Periodically this assessment will be in more structured, formalised settings where teachers will need to obtain a snapshot of the students’ progress in order to make decisions on future planning and to report on progress. This may involve the students in doing projects, investigations, case studies and/or tests and may occur at defined points in the school calendar.

Formative Assessment
Assessment is formative when either formal or informal procedures are used to gather evidence of learning during the learning process, and used to adapt teaching to meet student needs. The process permits teachers and students to collect information about student progress, and to suggest adjustments to the teacher’s approach to instruction and the student’s approach to learning. Assessment for learning covers all of the aspects of formative assessment but has a particular focus on the student having an active role in his/her learning.

Summative Assessment
Assessment is summative when it is used to evaluate student learning at the end of the instructional process or of a period of learning. The purpose is to summarise the students’ achievements and to determine whether and to what degree the students have demonstrated understanding of that learning by comparing it against agreed success criteria or features of quality.

Features of Quality
Features of quality are the statements in the subject specifications that are used in making judgements about the quality of student work for the purpose of awarding achievement grades for certification. As success criteria are closely linked to learning intentions and based on the day-to-day processes in the classroom, student learning will gradually come to reflect the requirements set out in the features of quality which are used for certification purposes.
Further Reading

*The Right Question the Right Way: What do the questions teachers ask in class reveal about student learning?*  

*Inside the Black Box: Raising Standards Through Classroom Assessment* (Paul Black and Dylan Wiliam, King’s College, London, 1998)


*Embedded Formative Assessment* (Dylan Wiliam, Solution Tree 2011)

*Formative Assessment in Action* (Shirley Clarke, Hodder Murray, 2005)

Useful Websites

Assessment Toolkit

Dylan Wiliam’s website

National Behaviour Support Service bookmarks

Geoff Petty’s website

Kings College Assessment Group

Credit: NCCA wishes to acknowledge and express gratitude to The Council for Curriculum, Examination and Assessment, Northern Ireland (www.rewardinglearning.org.uk) and Education Scotland (www.journeytoexcellence.org.uk) for use of materials in these booklets
Notes


