



**Professional
Development
Service for Teachers**

Assessment for Learning (AfL) in Geography

Spring 2014

PDST Geography

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[Link to PDST site](http://www.pdst.ie)

Credits

This AfL session was designed in late 2013 and early 2014 by the PDST Geography team including:

Adrian Barrett – Sligo

Aelsa Carroll – Dublin

Brendan Cremmin - Cork

Fiona Fay – Dublin

Cathal O Conchuir – Galway

Marcella Strong – Louth

Yvonne Walsh – Ennis

Team co-ordinators: Miriam Hamilton and Tony Dunne

Workshop Learning Outcomes

- Aware of the reasoning behind AfL
- Aware of the 5 main elements of AfL
- Appreciation of the importance of questioning in AfL
- Willingness to give some aspect of AfL a try back in school

Our Approach

- No experts just facilitators
- Worked examples
- Use some of the resources from previous in-services
- Participation
- Discussion
- Relevant to future assessment changes

Assessment ?

exit pass diagnose
summative marking
soup
questioning Learning
concept map effective
Teaching information
Peer-Assessment understanding Self-Assessment
Assessment for Learning Success Criteria
goals improve progress standards test Assessment of Learning
evaluation Feedback formative
Assessment
Learning Outcomes



Professional
Development
Service for Teachers



Defining Assessment

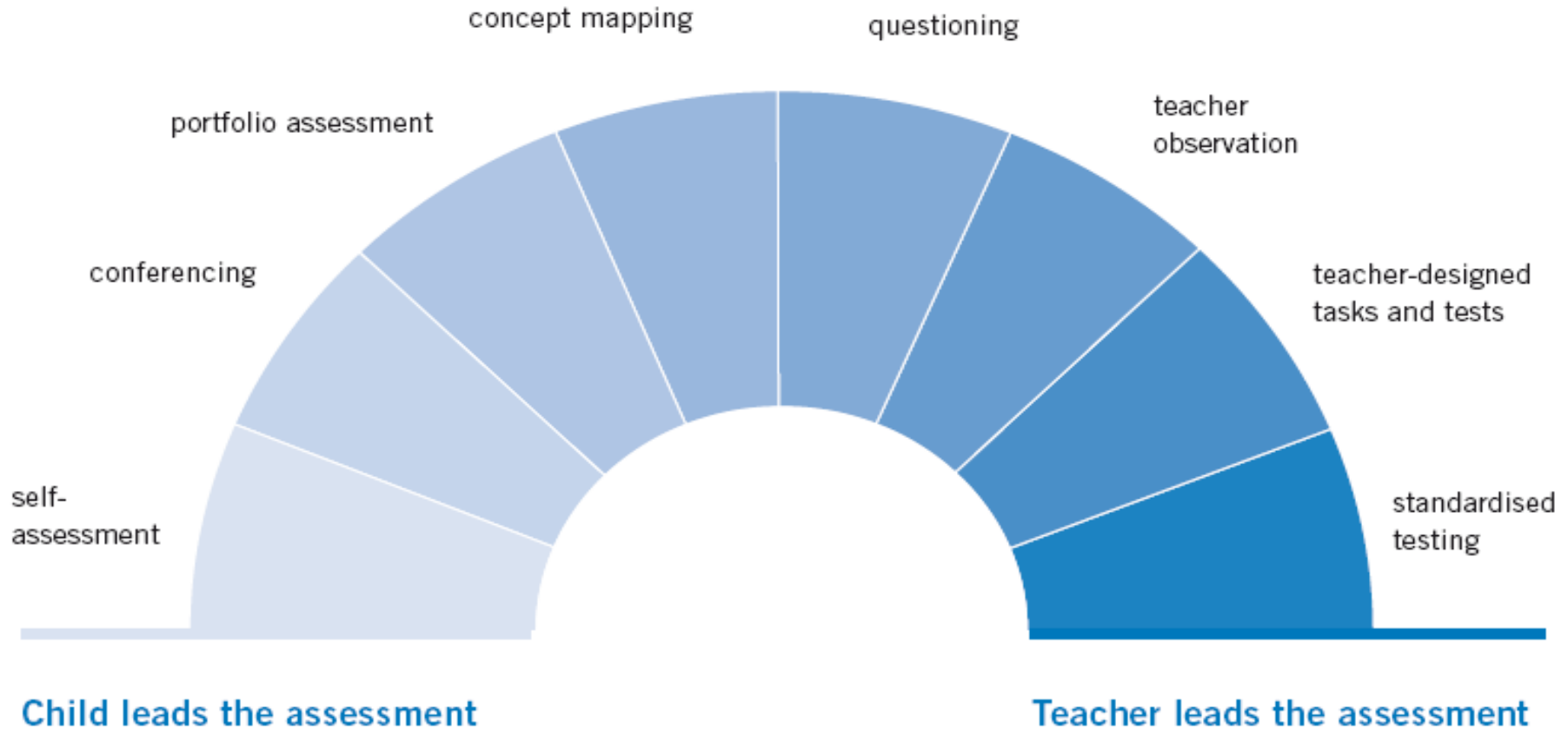
“Assessment in education is about gathering, interpreting and using information about the processes and outcomes of learning”.

“It takes different forms and can be used in a variety of ways...”

Assessment in the Primary School Curriculum – Guidelines for Schools. NCCA 2007 p.7

<http://www.juniorcycle.ie/About.aspx>

Continuum of assessment



Assessment **for** Learning (AfL)

Enables teachers and students to focus on three key questions -

1. **Where are** students **now** in their learning?
2. **Where are** students **going** in their learning?
3. **How** will students get to the **next point** in their learning?

NCCA Assessment Guidelines p9.

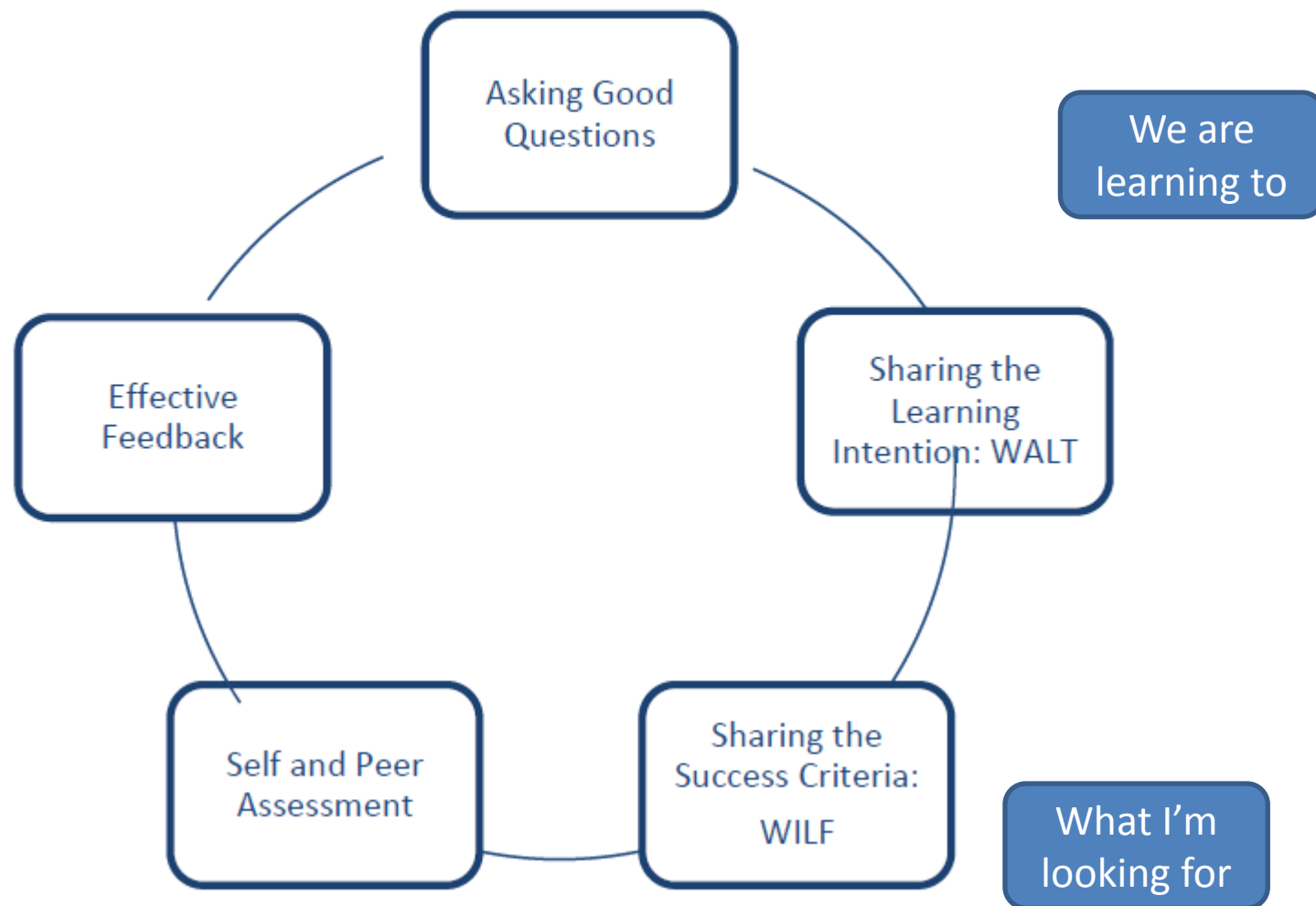
Assessment for Learning: Key Elements

1. Learning Outcomes and Success Criteria
2. Effective Feedback
3. Effective Questioning
4. Self assessment - Students as owners of their own learning
5. Peer Assessment - Students as Instructional resources for each other

Assessment for learning strategies need to be phased into practice over time.

AfL Assessment for Learning – A Practical Guide 2010 p38

Assessment *for* Learning



‘when the cook tastes the soup, it is formative or AfL; when the guests taste the soup, it is summative AoL.’

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A questioning approach by teacher and students

Teacher

- Where are they now?
- Where am I taking them?
- How are they getting there?
- How do I know they've arrived?

Student

- Where am I at?
- Where am I going?
- How am I going to get there?
- How do I know I've arrived?



Naji al-Ali Lebanon

AfL in the Geography classroom

An exemplar

Geography and AfL

- Geography is about the relationships between people and places
- The science of observation and location
- Many stimuli available for investigation such as maps, photographs, graphs, cartoons, diagrams, videos etc
- Local environment can be investigated through fieldstudies

Afl example: sketching a photograph

- Shared learning outcome
To draw a sketch of a photograph
- What you will need to do to achieve this

Draw a frame

Insert main lines such as horizon or coast

Name and locate features on the sketch

Construct a colour key

Title the sketch

Checking previous knowledge of location

Where's the dot?



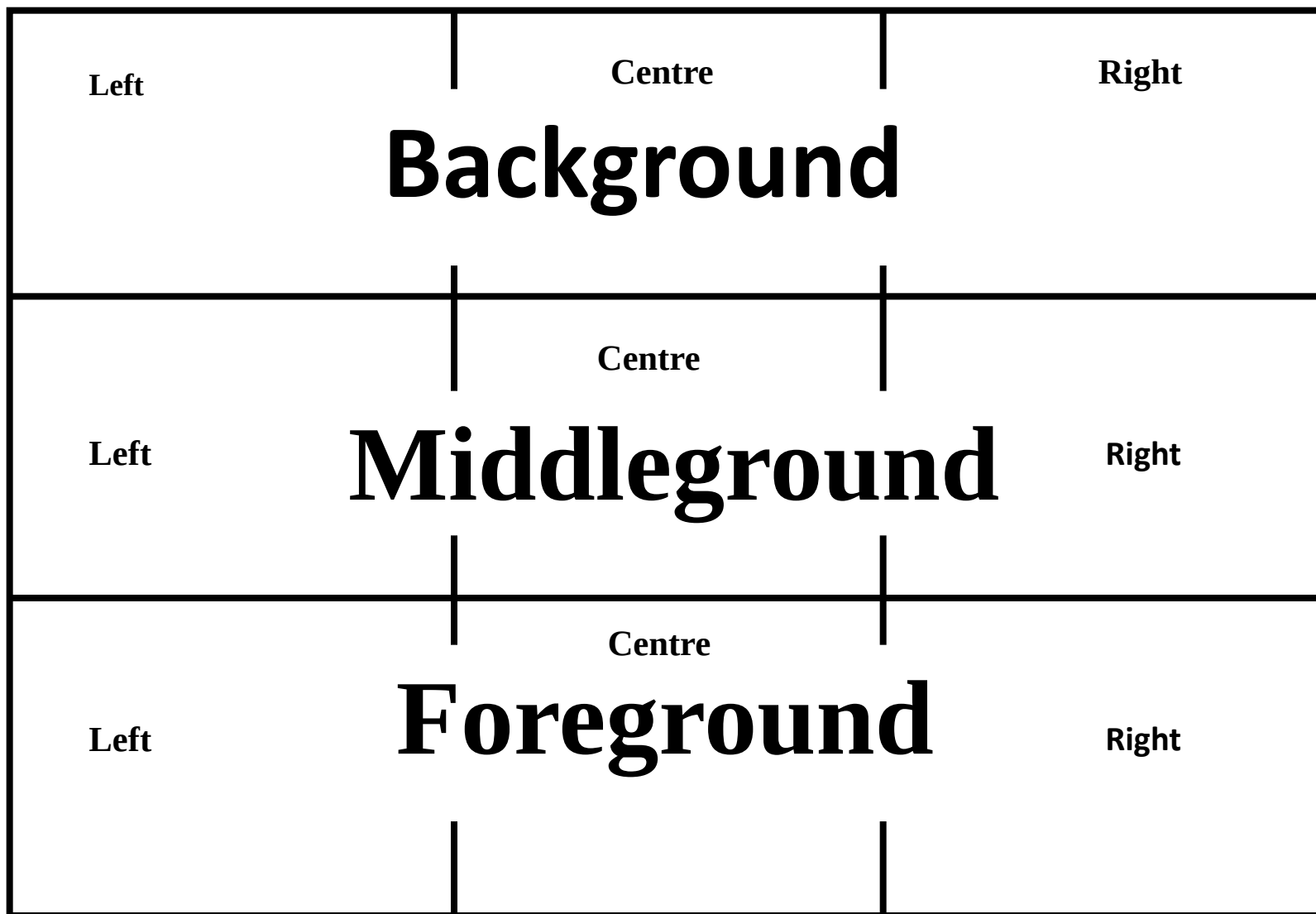
- Where's the boy? **Letterfrack 1987**
- Where's the boy in the photograph?
- Where's the boy exactly in the photograph?

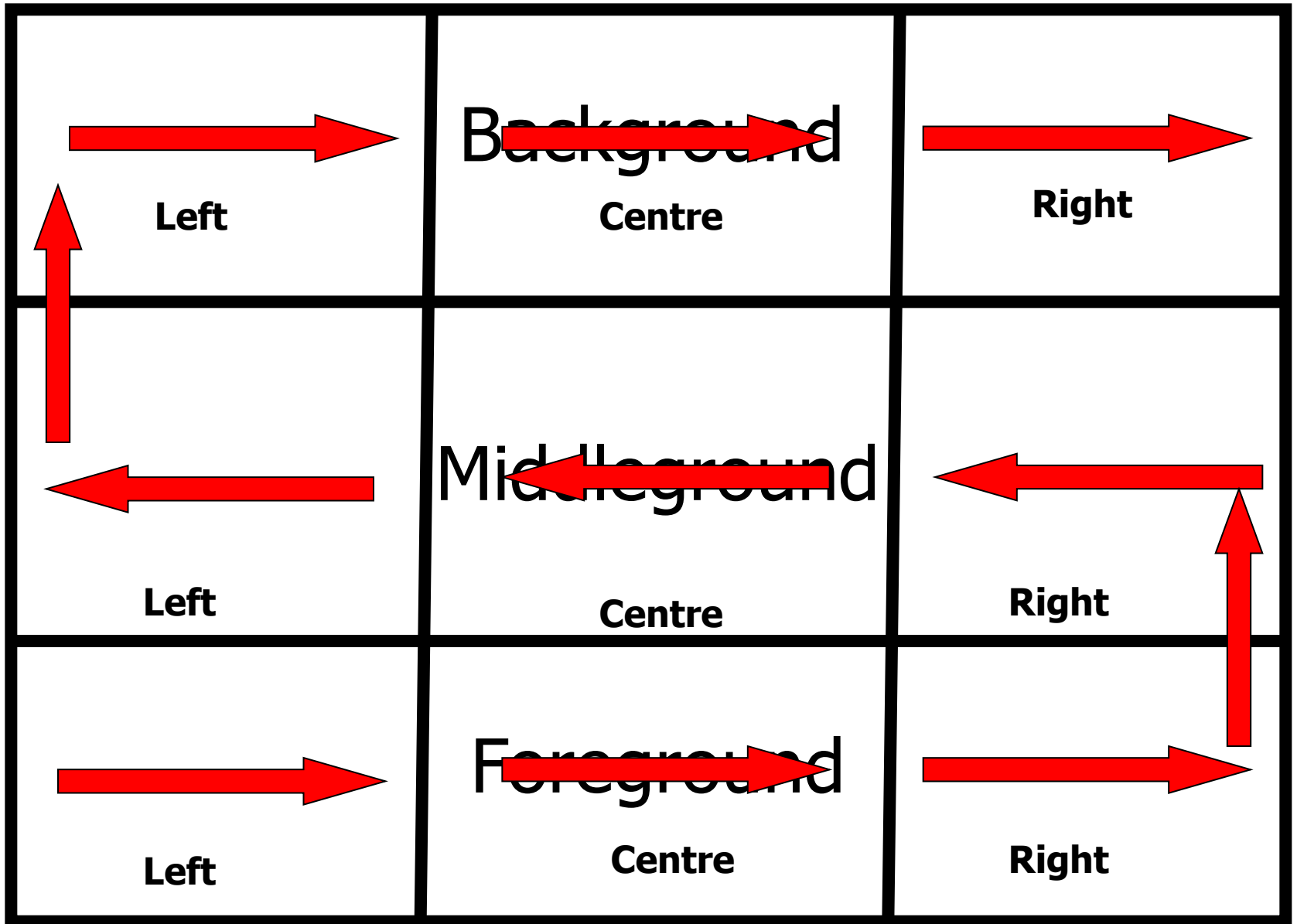


Background

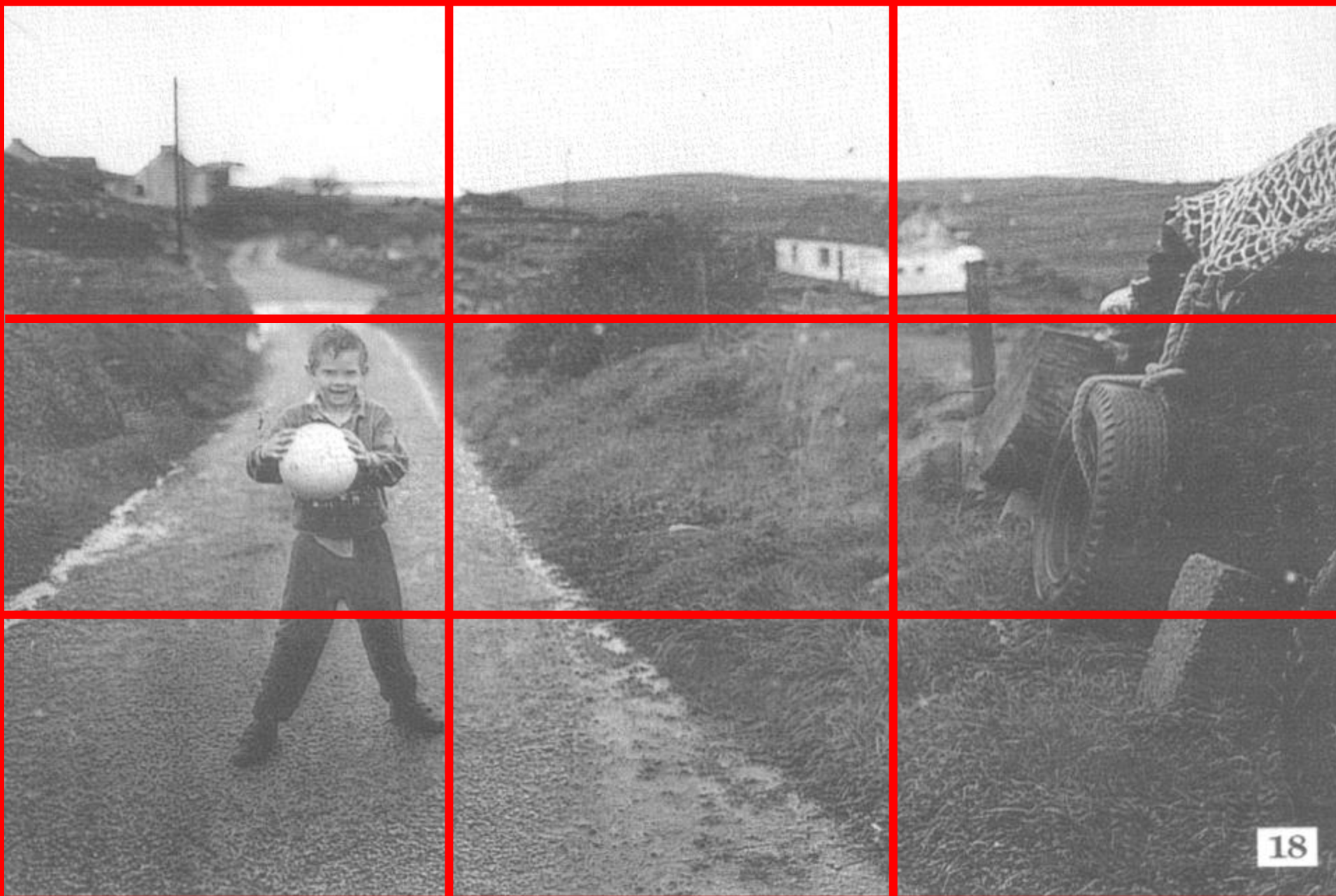
Middleground

Foreground





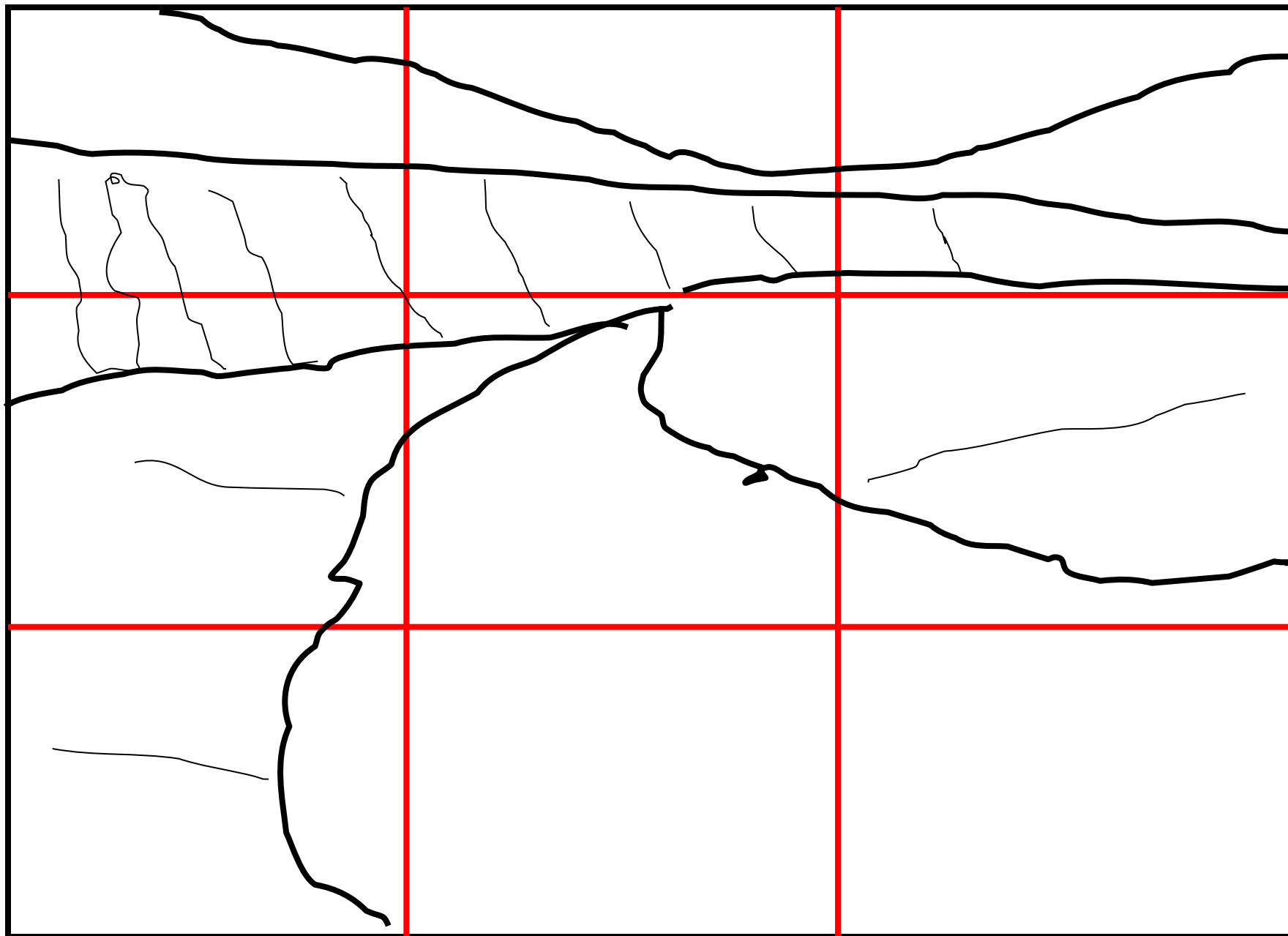
Letterfrack 1987



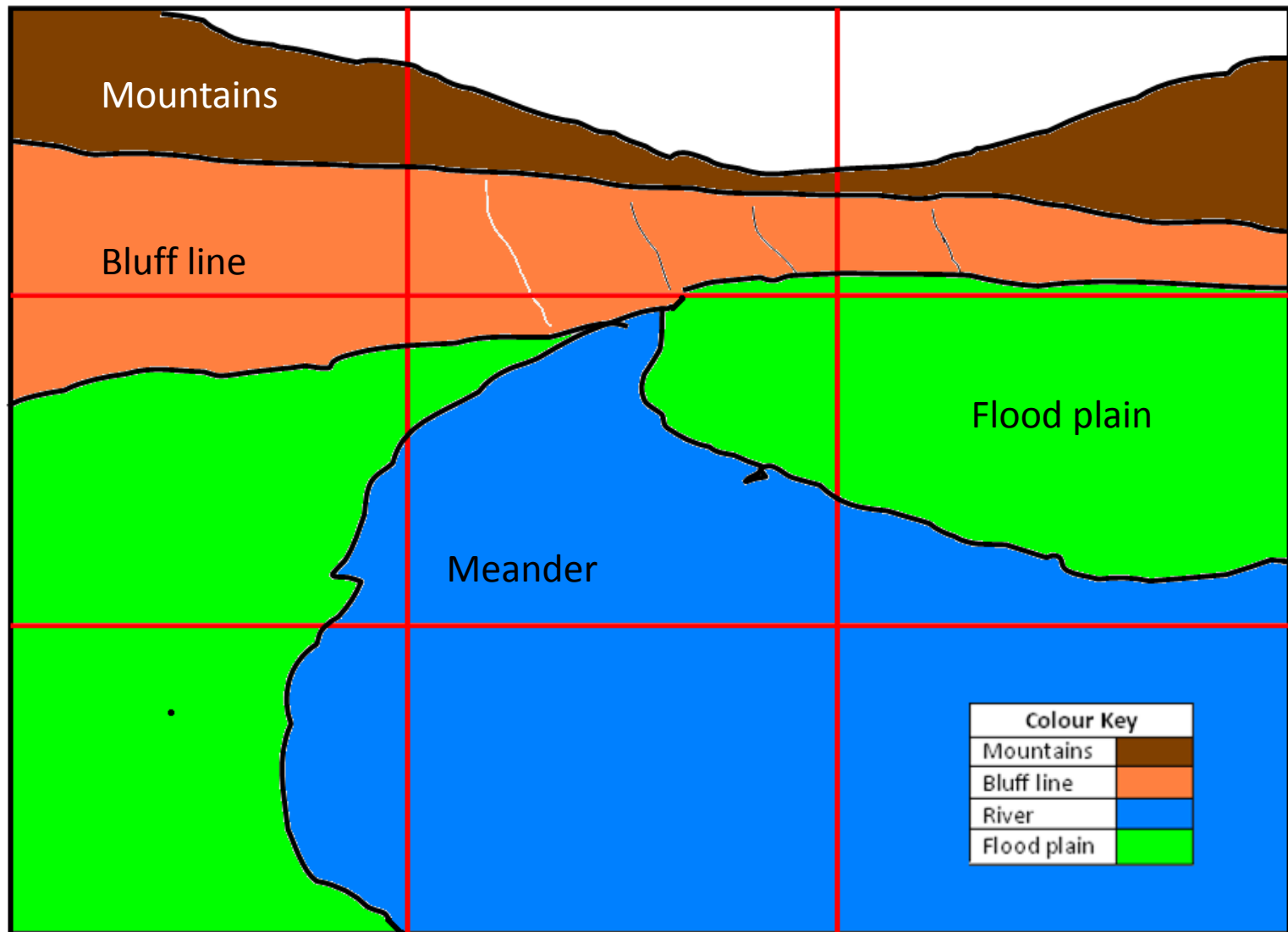
~~Drawing a sketch of a photograph~~



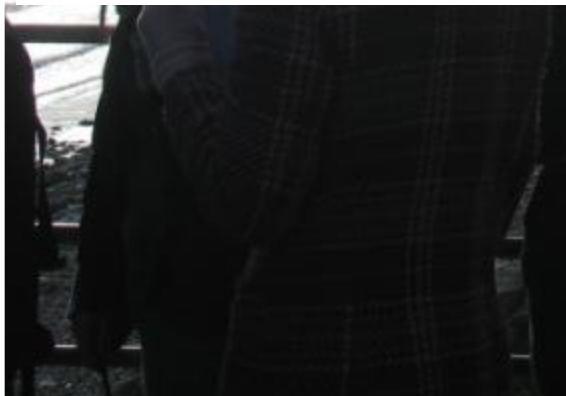




Sketch of a meander on the Dargle river







Fieldsketch Looking South from Corbawn Lane

Key

Quartzite

Bray Head

Headland

Checklist for drawing a sketch of a photograph

	Green	Amber	Red
Is there a frame?			
Is there a title?			
Is there a colour key			
Are the main lines such as the coast and horizon there			
Are the 3 feature located accurately with a box			
Are the 3 features named properly			

What did I do really well? _____

What do I need to practice? _____

Blind Drawing

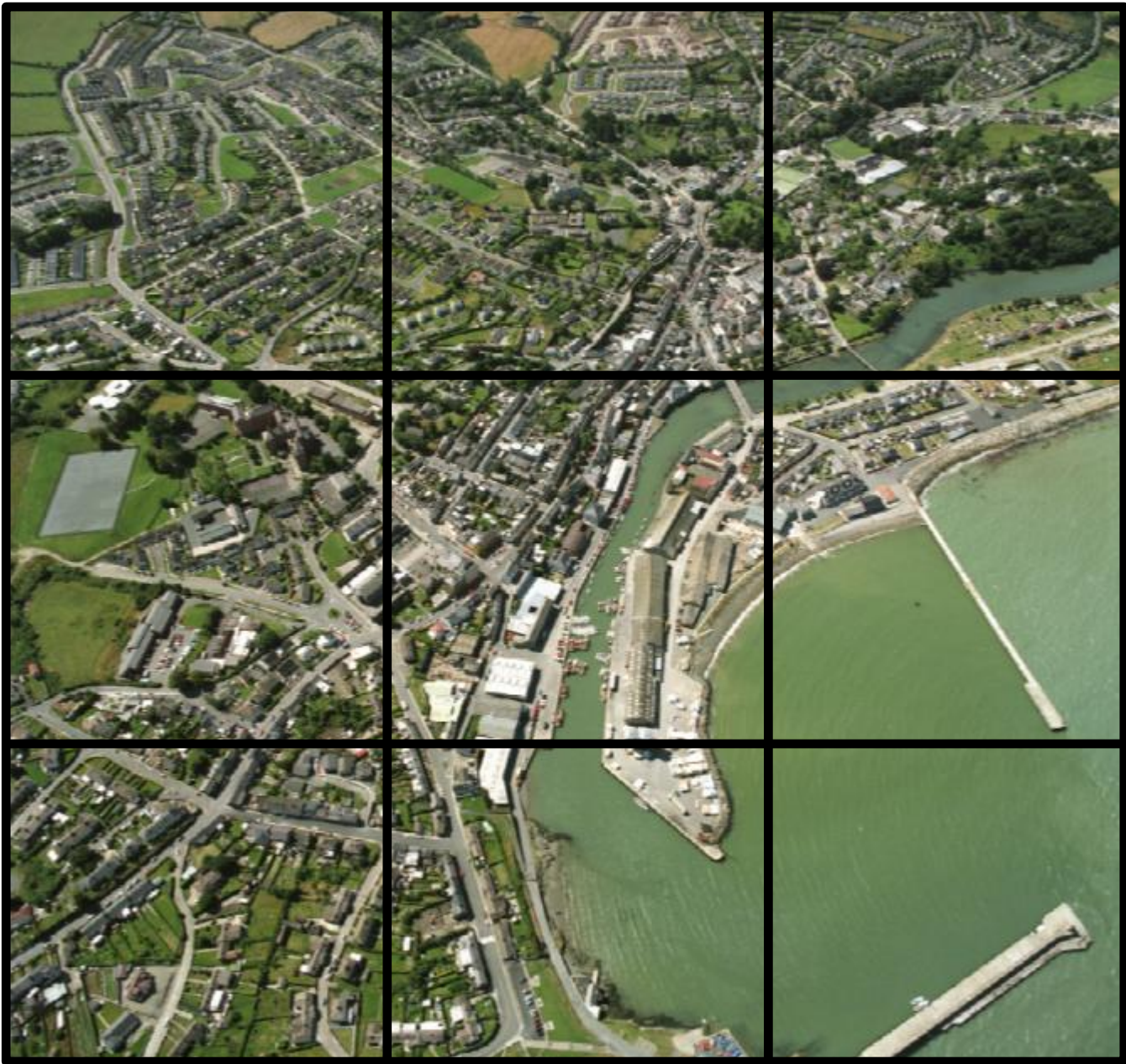
- Pairs sitting back to back
- One of the pair faces the screen the other faces away
- Person facing the screen describes the photograph using the nine square grid
- Partner draws and can question but not look
- Insert coastline
- Insert a road, an industrial building, and a playing field

Dingle – An Daingean Cuis 2012



Blind Drawing Continued

- Switch places and roles and work as before on the second photograph



Blind Drawing Continued

- Finish off your sketches
- Use rubric to assess your own sketch
- Use the rubric to assess your partners sketch
- Discuss your assessment of each others sketch
- What did do well?
- What do you need to improve?

Teacher getting feedback 1

- Teacher observes students and listens very carefully to the pairs as they do the drawing:
 - Are they using the grid?
 - Are they using the terms correctly?
 - Are they able to communicate with one another?
 - Who is finding it difficult?
 - What are the difficulties?
 - How can I help them to overcome these difficulties?

Teacher getting feedback 2

- Students self assess using rubric
- Students peer assess with partner using rubric
- Teacher observes and listens to the students
- All students hold up rubric for teacher to assess the class
- Teacher asks students can they sketch a photo.
- Students indicate using traffic lights, thumbs up/down, or fingers (3 = Yes, 2 = Partly, 1 = No)

Teacher action after feedback

- Teacher work with reds while ambers discuss with greens where they went wrong
- or
- Greens and ambers paired with reds to help them develop the skills

Questioning



Bo Brown USA

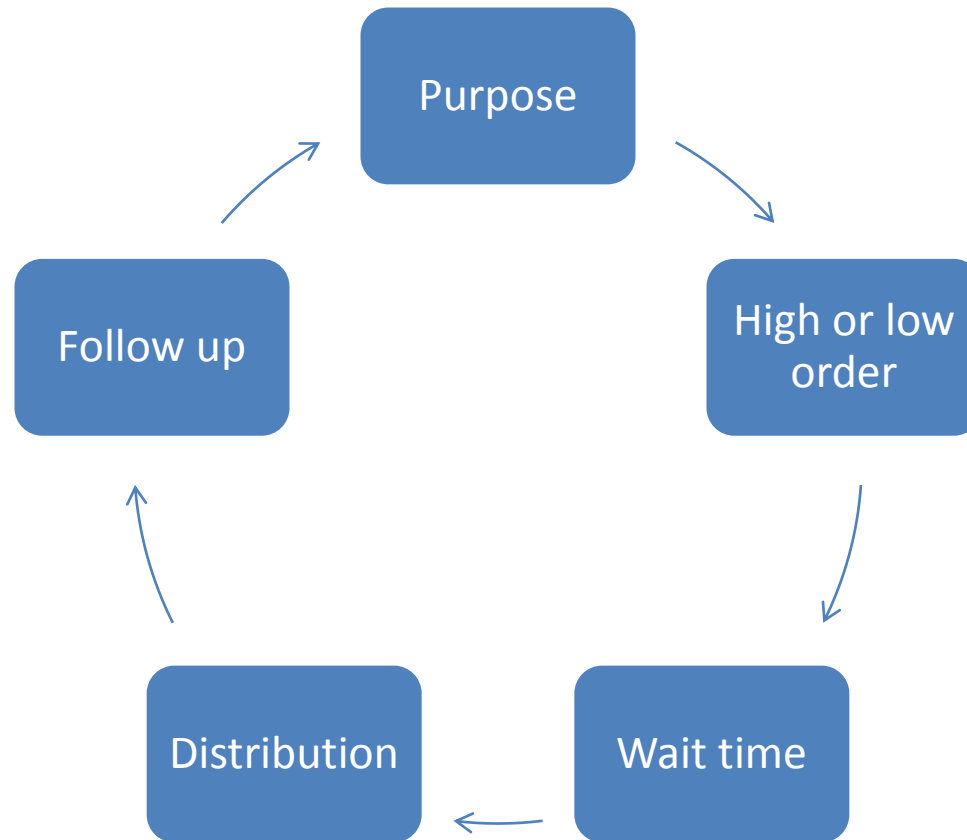
The Wall Street Journal

'That's a good question which demands some real evasion.'

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

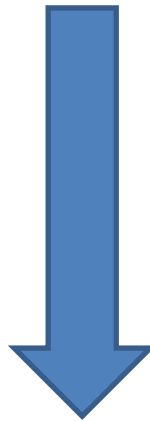
John Dewey.

Quality questioning



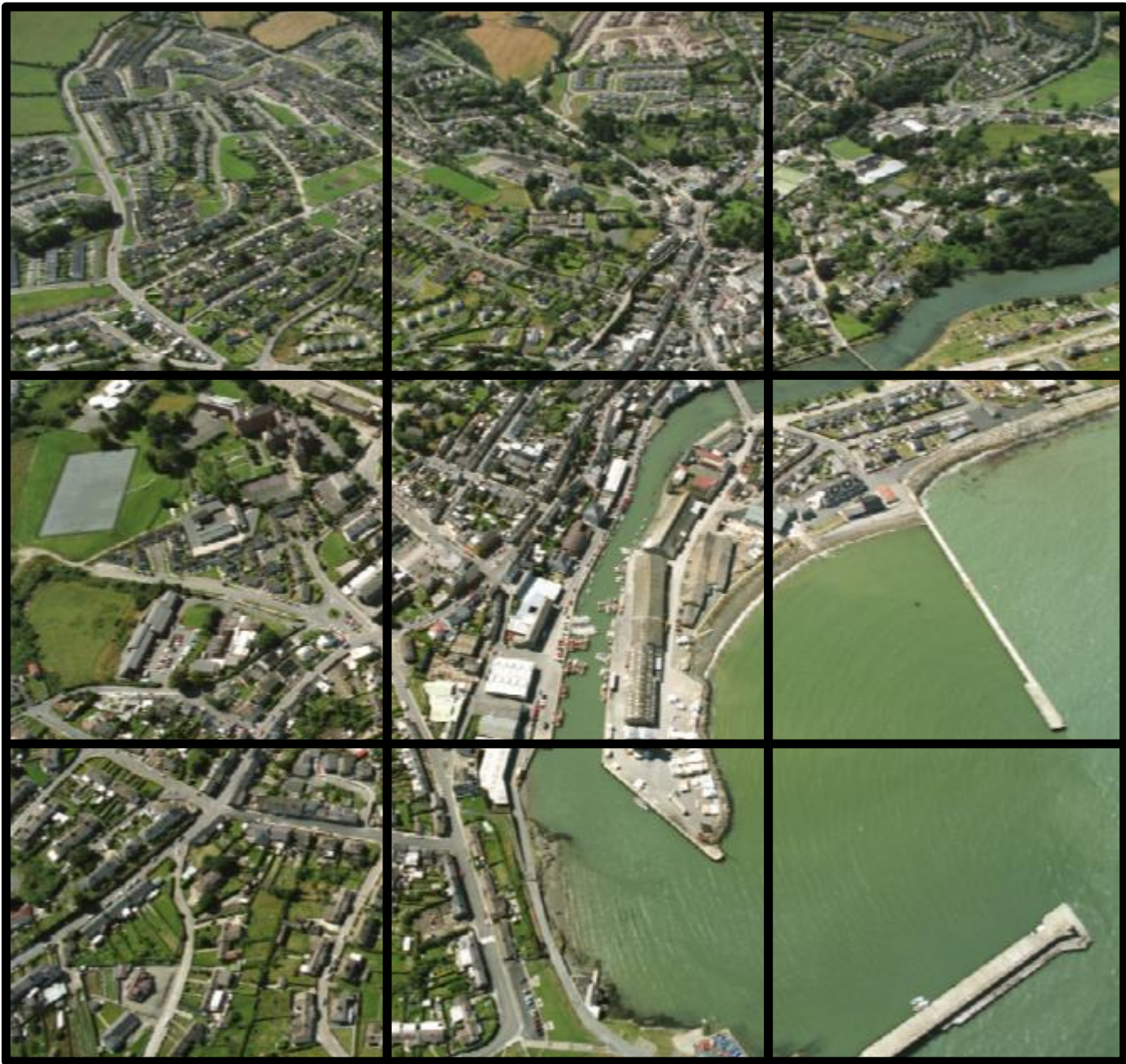
So questions should assess different skills and venture towards higher order thinking?

1. Recall
2. Comprehension
3. Application
4. Analysis
5. Synthesis
6. Evaluation



Dingle – An Daingean Cuis 2012





Question types on Dingle and Wicklow photographs

- A. Name the towns.
- B. Are they high or low oblique photographs?
- C. What type of photographs are they?
- D. Give the location of a quay.
- E. Name and locate 3 functional zones in each.
- F. Classify them as central places.
- G. Compare Dingle with Wicklow.
- H. Where would you locate a shopping centre in---?
- I. 'Of the two I'd prefer to live in Dingle.' Discuss.

High order or rich questions

- Usually not one word answers
- Cannot be answered immediately
- Require thought
- Often open ended
- Require learners to make links
- Often require learner to ask themselves further smaller questions

This is an excellent example of a multicyclical landscape. Do agree or disagree with this statement. Explain your answer using evidence from the photo

Soil and
vegetation

Till

Peneplain

Rock and folds

Think

Pair

Share



Processing this question in my head

- What does multicyclical mean?
- Is this an example of a multicyclical landscape?
- Is there evidence for different cycles such as rocks, tectonic, fluvial, coastal, water, nutrient etc?
- What landforms can I identify to support this
- Is this an excellent example of same?

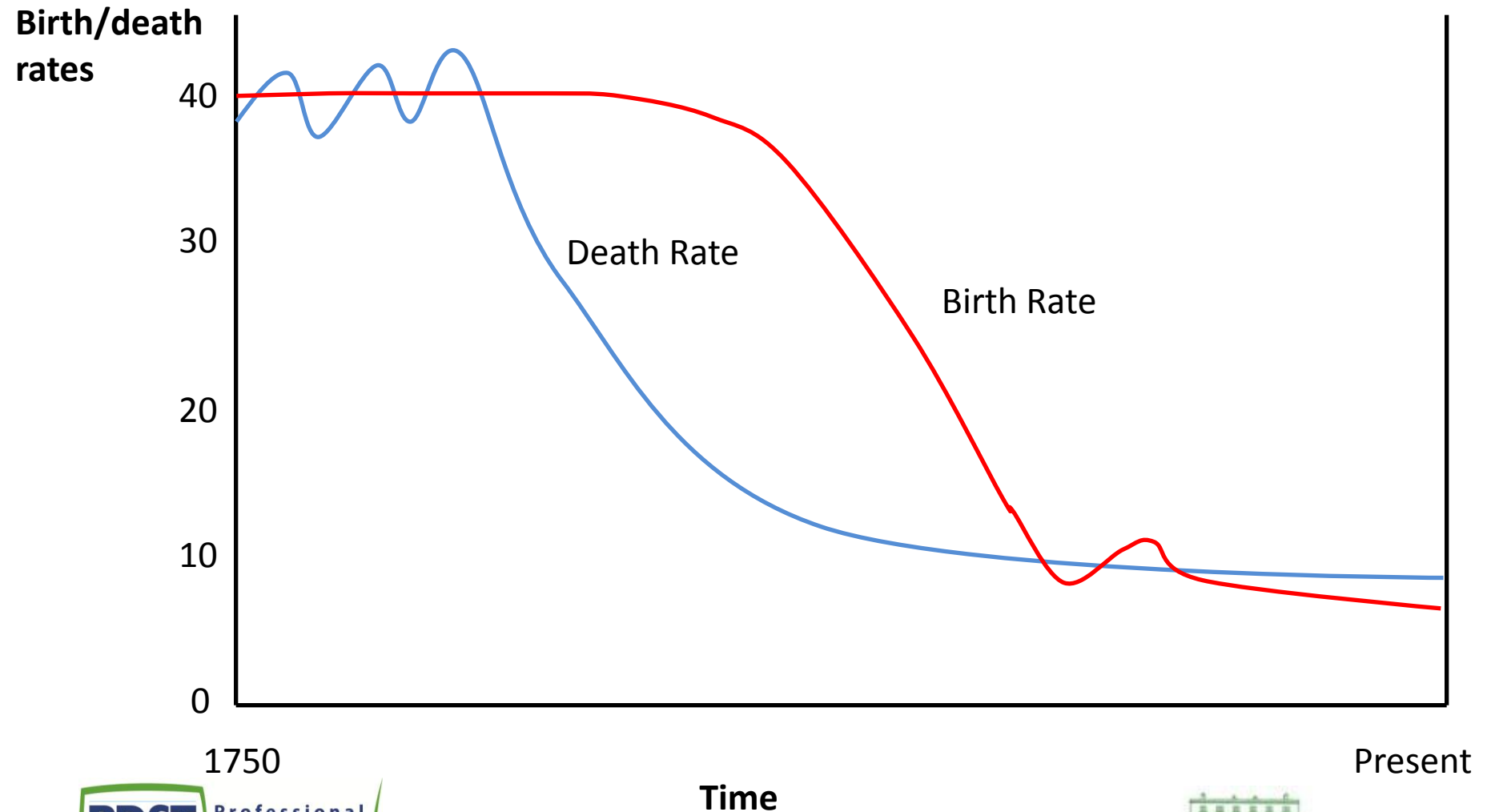
Other questions on the photograph

1. What is the oldest thing in the photo?
2. If we came back in 1 million years what changes might have happened?
3. What is a stone age person landing here by boat likely to have seen?
4. What processes are currently working in the landscape here?
5. Title the photo and explain your title.

Living graphs

- Gives a human context for the information
- Helps students to relate to information
- Encourages thinking
- Placement of statements must be explained by reference to information from the graph
- Can be used with maps and photos as well

Population Cycle



John the gravedigger loses his job

Population cycle

A mother sobs over the death of her last 6 children who died in a cholera outbreak

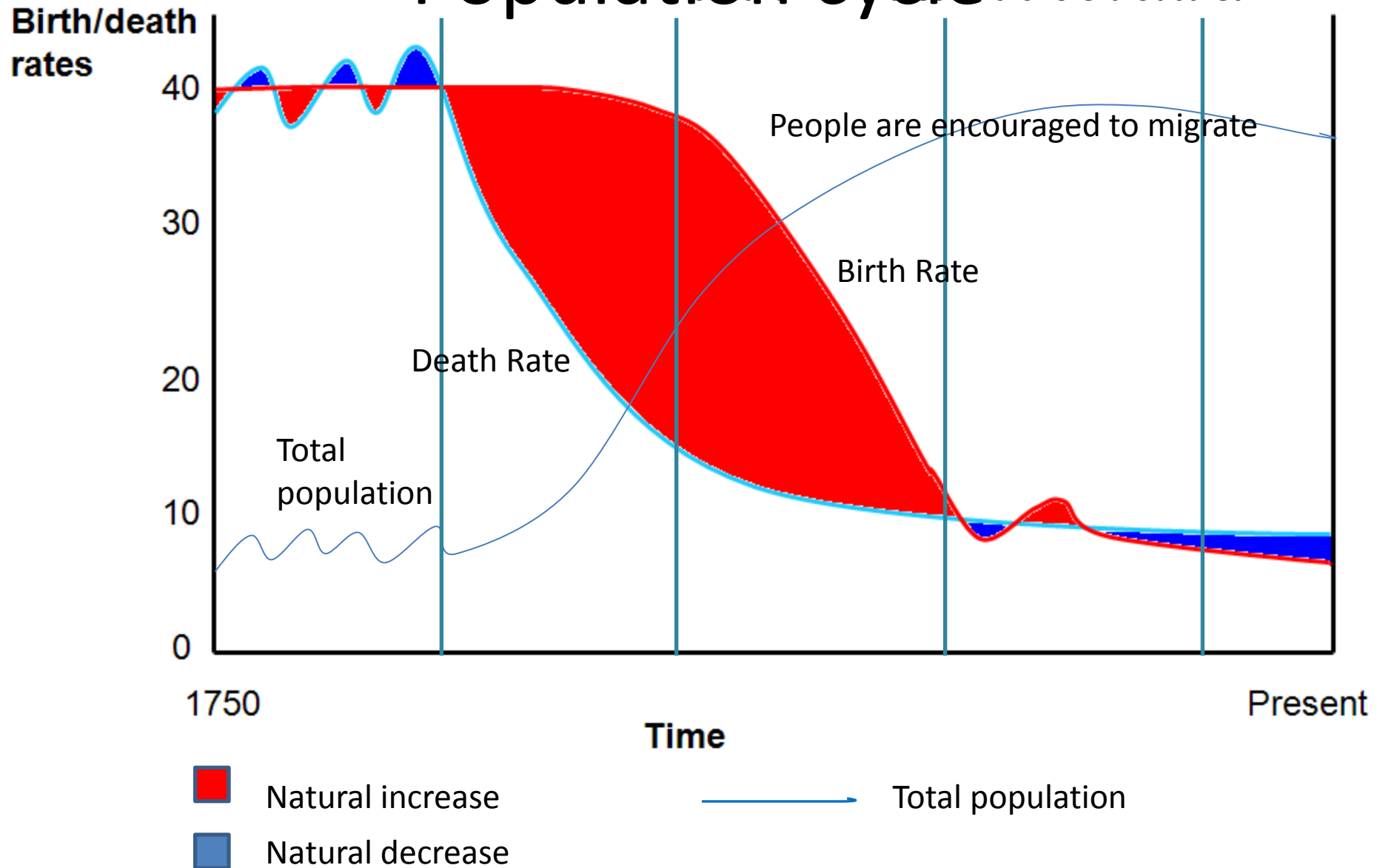
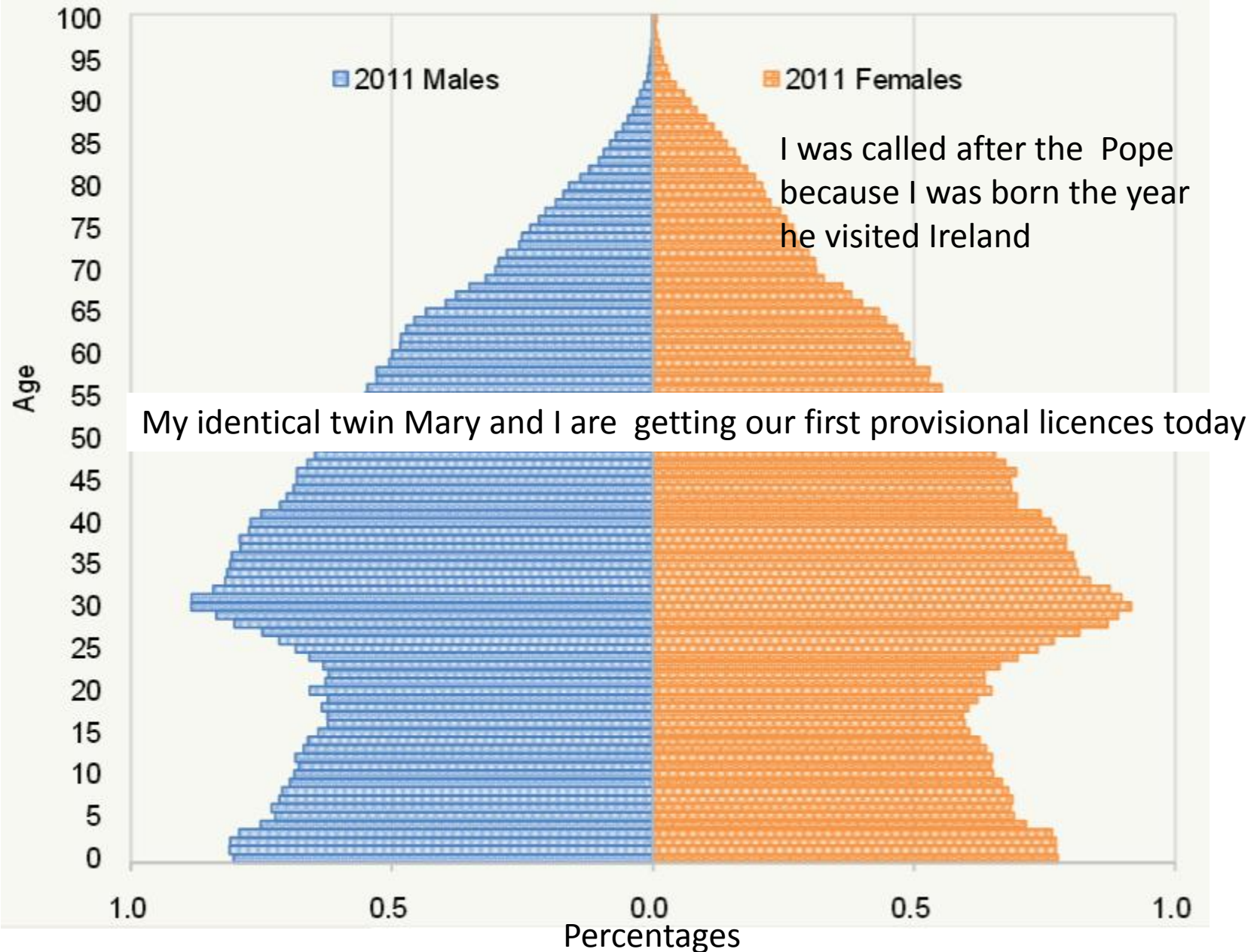
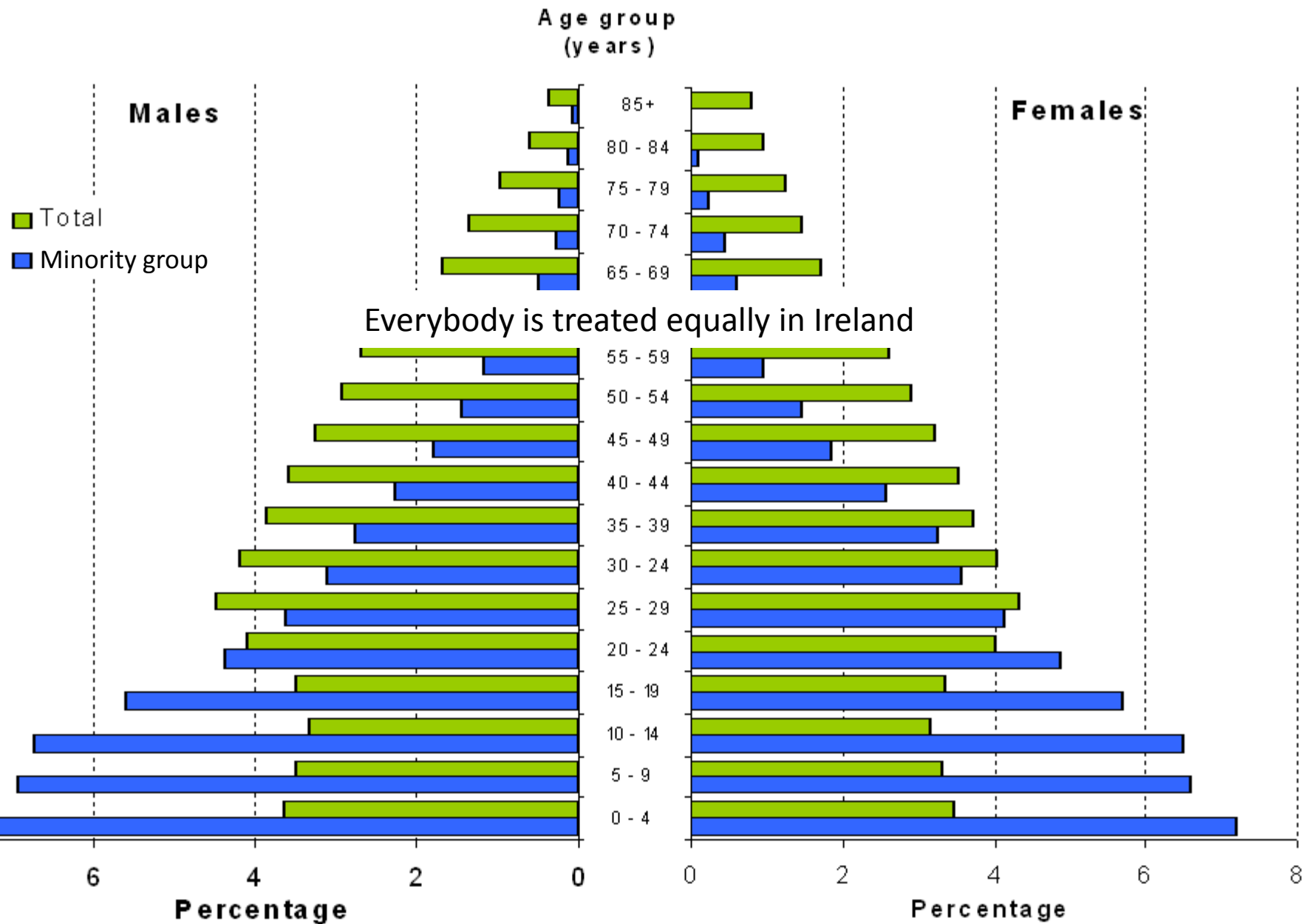


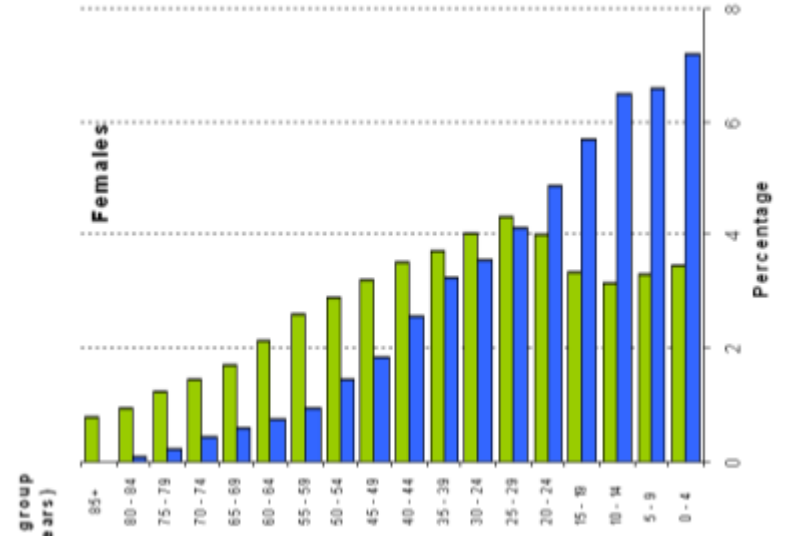
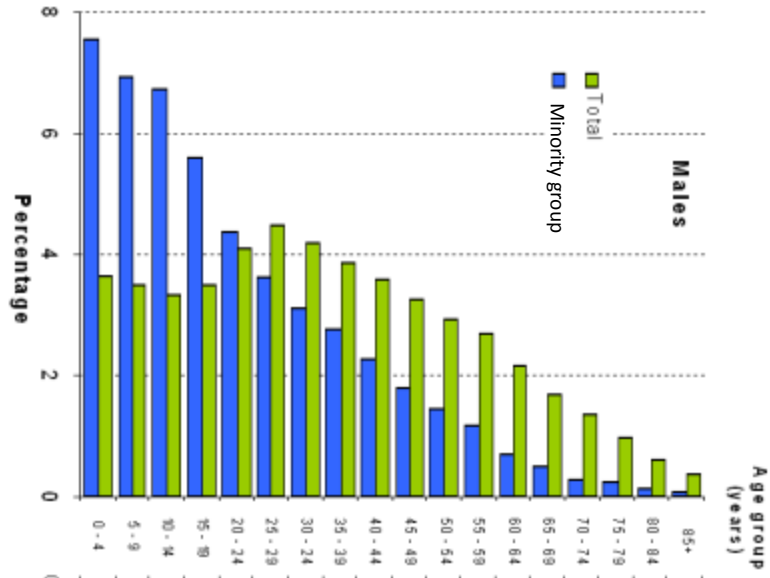
Figure 7 Population 2011



Pyramids for Irish population and for a minority group 2006



Pyramid can be split and turned on its side for ease of comparison



Problems with questions

- Most are low order
- Impromptu, unplanned on the spur of the moment
- Only 20% require thinking
- Wait time too short
- Often only to certain students

How can we improve our questioning?

- o Ask 'open' questions – to promote thinking
- o Increase 'wait time'
- o 'No hands up'
- o Allow students to confer
- o Acknowledge and give feedback
- o Have students formulate questions

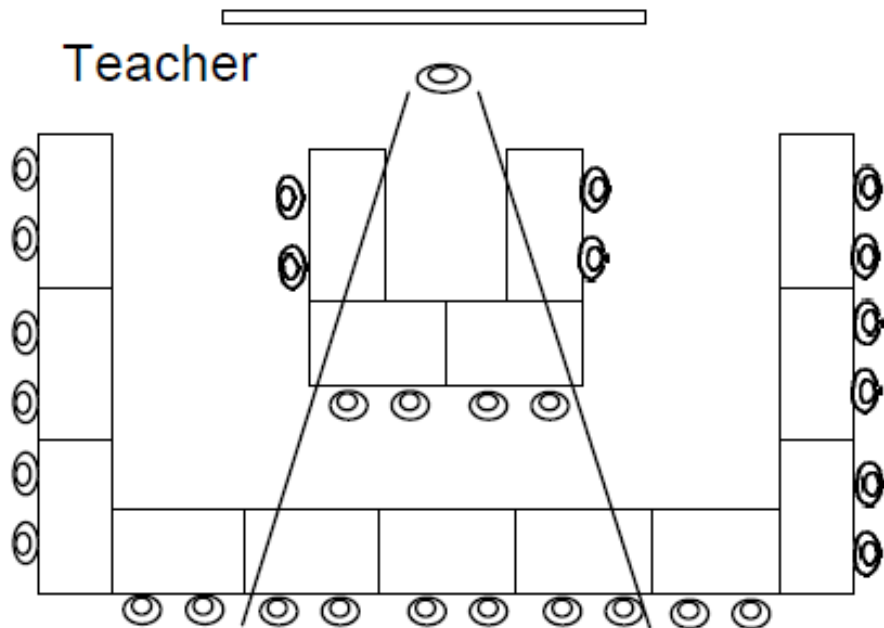
Planning Questions

- Questions need to be prepared
- Geography team might discuss role of questions in their subject
- Include key questions in year plans
- Include key questions in lesson plans
- Put up key questions around the class
- Awards for quality questions

Distributing questions

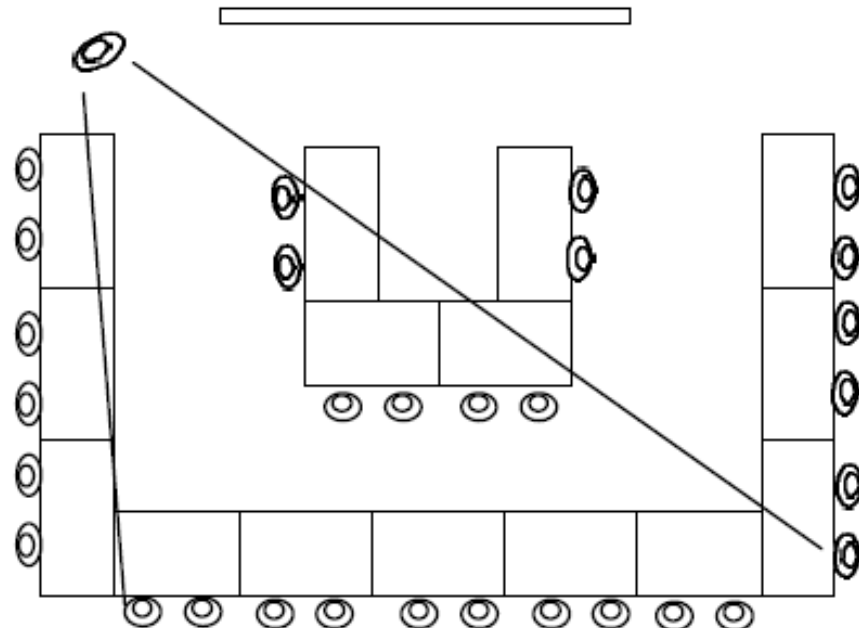
- Hands down- think - wait
- Lollipops with names – random – anyone can be asked
- Give students a country name – have the country names in a box. Select a country that student answers
- Give 3 post-its to each student. They hand one up when they ask a question or a quality one

Teacher



Pupils

A



B

Solving a mystery in the local environment

- At the end of a study on weathering.
- Pose the question:

Is weathering affecting our school at the moment?

- How could we get the answer to this question?

Success criteria

- Get a map of the school from Scoilnet Maps
- Plan a route around the school
- Get a compass and be able to use it
- Walk route looking for evidence of mechanical, chemical, biological weathering
- Photograph the evidence
- Draw a large map of school and locate the photos on it

Criteria for written report

- Aim: we set out to-----
- Plan: we planned-----
- Gathering our data: we set out --- we observed, identified, photographed -----
- Our results: we found-----
- From these results we could tell-----

Hi, I'm Speardy
the Norman

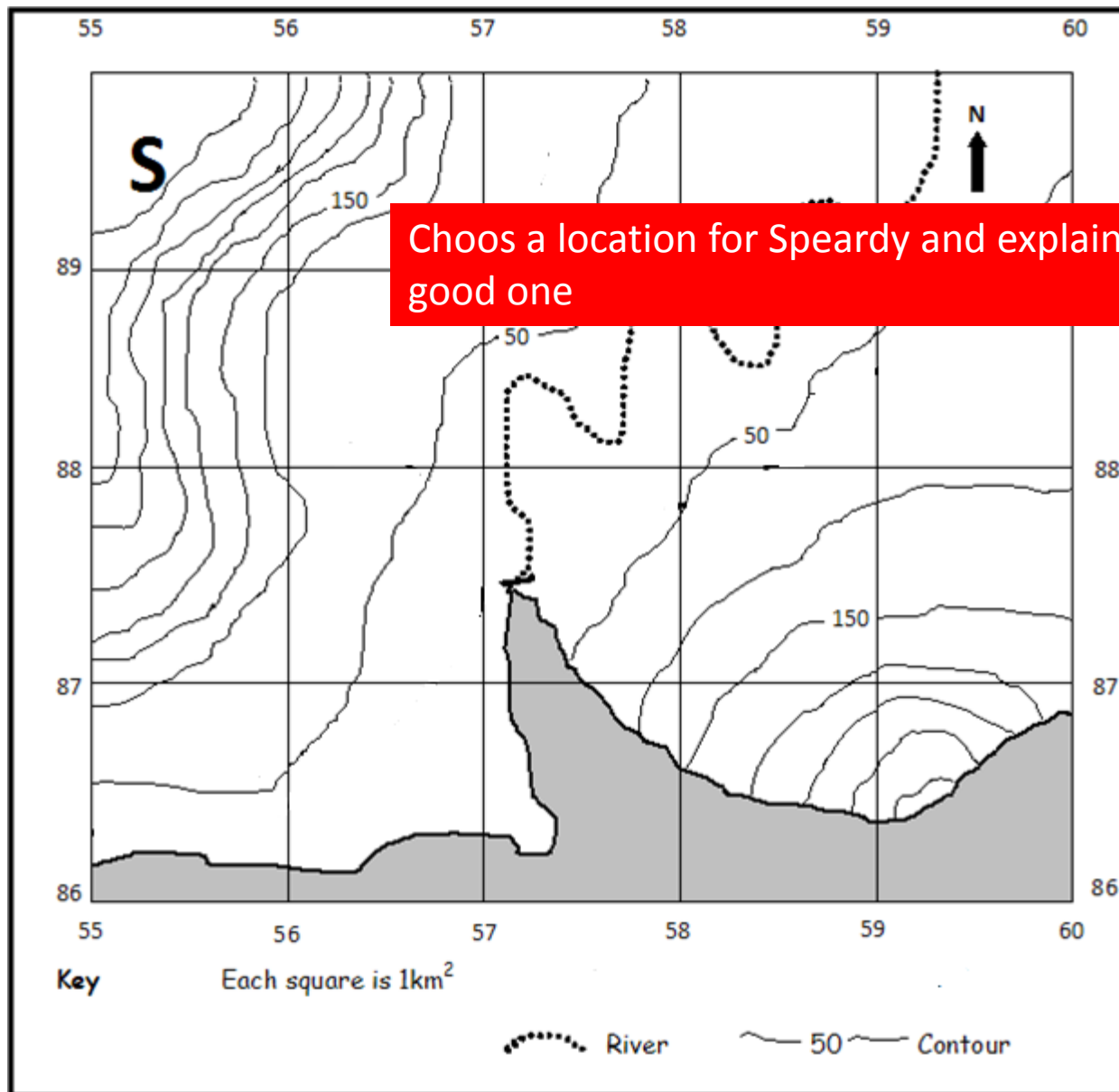


What are you
looking at Celty?

I'm going to conquer this area and set up a town so I want!

- Lowland – easy to build on
- Wood and rock for building and fuel
- Fertile land – crops – tax – wealth
- Rivers – water – power – food
- Easy to defend
- Communications – routes to other Norman settlements – for trade and security

Shade in the land which is over 100 metres



Choose a location for Speardy and explain why it's a good one

Checklist for success

- Locate by grid reference

Explain choice of location

- Relief – height in metres, slope and aspect, landform
- Water source – river named
- Defence – difficult to attack – explain
- Routeways – land and sea – linking to

Effective Feedback

“Feedback is among the most powerful moderators of learning”

Hattie, 2012



Formative Feedback – methods where students get information about their learning

- Comment only
- Oral Feedback
- Rubrics
- Scaling
- Traffic Lights
- Peer Assessment
- Checklists

Feedback Sandwich – 2 ways

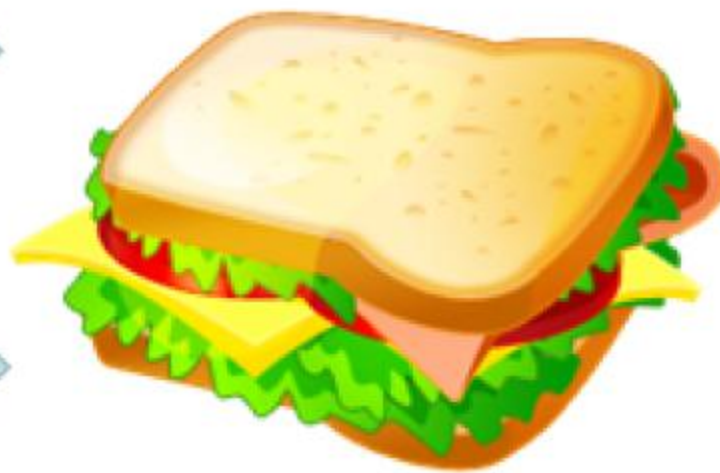
Positive Comment



Constructive criticism: How to improve....



Positive comment



Feedback:

Two stars = 2 things that are good about the piece of work

A wish = something they can improve to make it even better

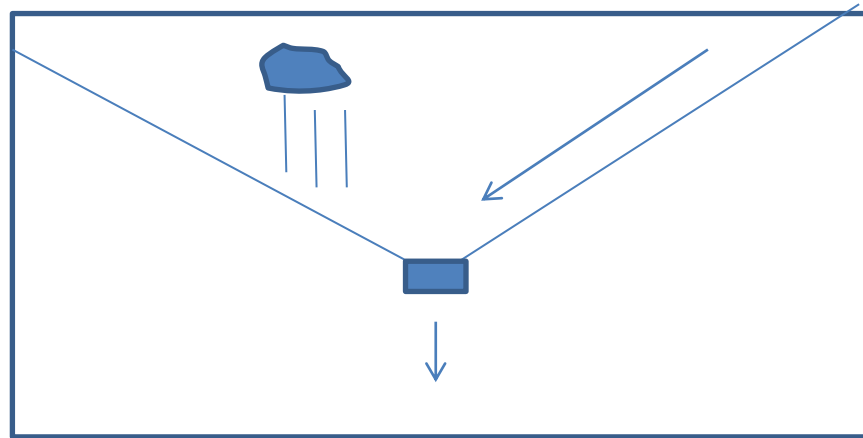
- **WWW:** What Worked Well
- **EBI:** Even Better If



My lundform is a vee valey like the one in Killarey. It was made by a river depositing and cutting into the rock. The river like a saw. It throws its stones. It carries away the brooken rocks like a transporter.

The weather helps by raining and onion weather. Brooken rock fall in soilsliders into the river.

Vee valey



Assessment for Learning (formative) is *not* an attack on **assessment of learning** (summative assessment). These are complementary approaches - it's about getting the balance right.

It is the teacher who decides the balance and timing of formative and summative assessments;



*(“Putting Assessment for Learning into Practice,”
David Spendlove, 2009)*

Assessment OF Learning (Summative)	Assessment FOR Learning (Formative)
Happens after learning takes place	An integral part of learning process
Information is gathered by teacher	Information is shared with learner
Information is usually transferred into marks	Information is available on quality of learning
Comparison with performance of others	Is linked to learning outcomes and success criteria
Looks back on past learning	Looks forward to the next stage of learning

So what's new?

- Little
- Teachers always used these techniques
- Also as parents, siblings, friends we always used these techniques
- Shift in focus from teacher teaching to student learning
- Focus is on how learning happens

Workshop Learning Outcomes

- Aware of the reasoning behind AfL
- Aware of the 5 main elements of AfL
- Appreciation of the importance of questioning in AfL
- Willingness to give some aspect of AfL a try

Assessment for Learning: Key Elements

1. Learning Outcomes and Success Criteria
2. Effective Feedback
3. Effective Questioning
4. Self assessment - Students as owners of their own learning
5. Peer Assessment - Students as Instructional resources for each other

Assessment for learning strategies need to be phased into practice over time.

AfL Assessment for Learning – A Practical Guide 2010 p38

So how did we do?

