Innovative school and curriculum design

Philippa Cordingley

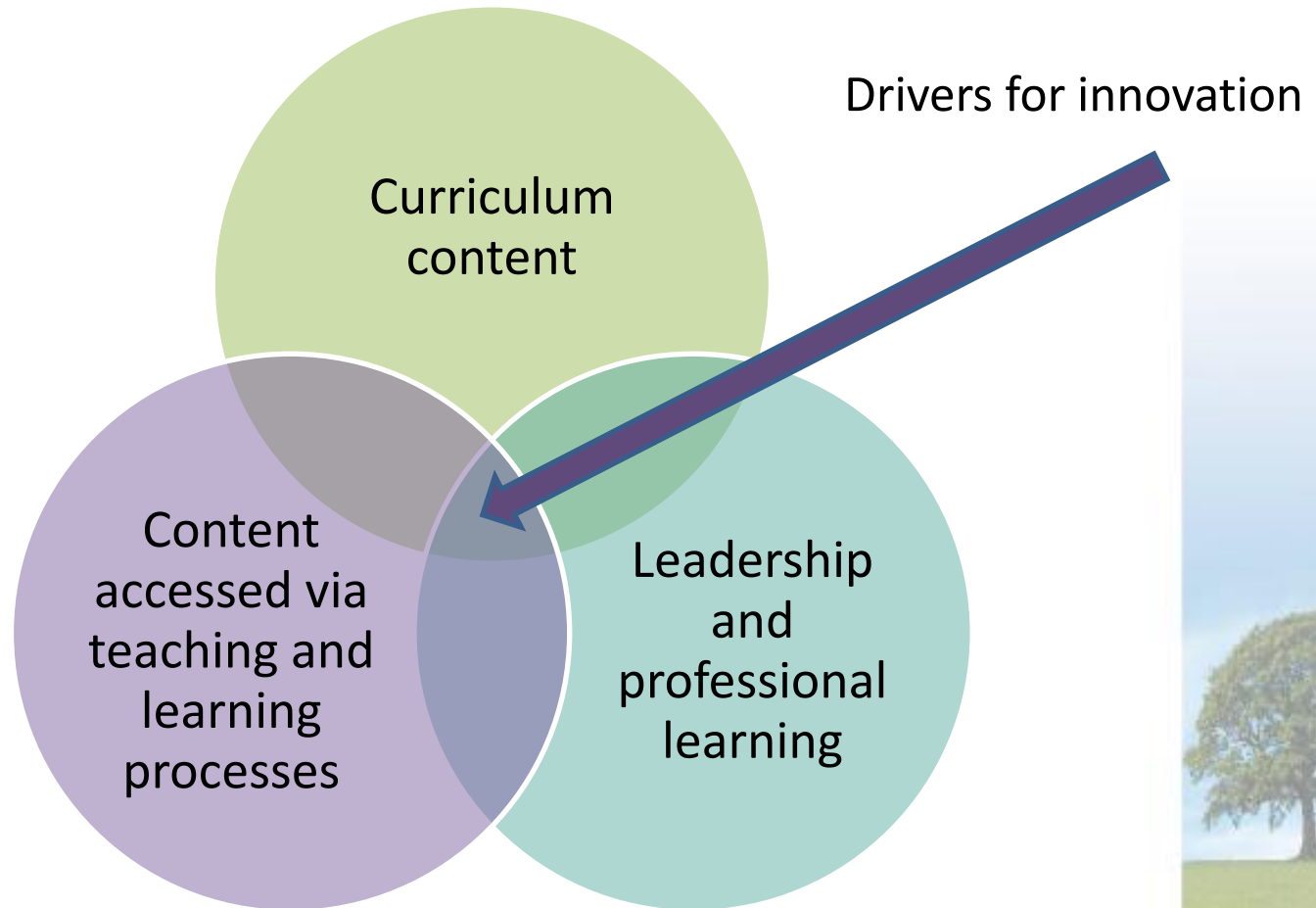**Centre for the Use of Research and Evidence in Education**

This presentation

- The evidence base
- Leadership of innovative school and curriculum design
- A primary case study
- Other key features linked with benefits to pupils
- A secondary case study
- The role of the professional learning environment

School and curriculum innovation

Curriculum content

Drivers for innovation

Content accessed via teaching and learning processes

Leadership and professional learning

The evidence base

- 3 comprehensive international research reviews

- 7 multi method, multi site probes – (799 pupils and teachers in 29 schools) interrogated via evidence base

- 3 large scale pupil surveys (15,060 pupils in 334 schools) and staff survey (570 teachers) triangulated via 20 focus groups of 6-10 pupils and or teachers

- Data extraction and analysis across whole to create a synthesis

- Plus a synthesis across 4 international systematic reviews about Continuing Professional Development and Learning

Leadership of curriculum innovation

- Leadership of Curriculum Development – depended on and was a driver for effective Continuing Professional Development and (CPD)

- Aligning curriculum and professional development made doing them them feel like doing the day job better to teachers and leaders

- Leaders used collaboration to help staff and pupils engage with multiple perspectives, expand possibilities and extend approaches and thinking – via team work and interdependent tasks

- Identifying opportunities within Curriculum Development for :

    - Teachers to work with specialists to design content and pedagogy

    - Staff to engage in collaborative professional learning

    reinforced innovation, improved achievement - and built a thirst for ongoing development

    http://www.curee.co.uk/node/3056

   **http://tinyurl.com/onk7329**

What this and other findings look like innovation at Wroxham School

- Whole school council

- Staff and pupils review curriculum every 12 weeks

- Pupils identify key interests/ contexts for learning

- Staff map this onto the National Curriculum and develop schemes of work with specialist support

- Senior leadership identify and remove barriers to staff learning/ curriculum realisation

- Teachers spot and remove barriers for pupils

- Innovation projects often the key curriculum driver

- Careful monitoring by Senior Leadership Team (SLT)
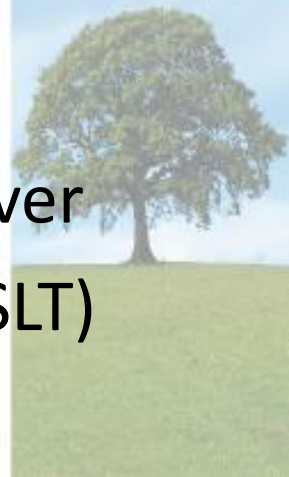
An example of innovative school and curriculum design Wroxham School

- Work with an artist on a sustainability project using rubbish from around the school to create a "driver"
- Working with an author on a reading environment
- **http://tinyurl.com/pty2pcq**

Made warm and manageable – with support from science, maths and technology projects in partnership with engineers

Innovation at Wroxham School

- New library as both project and curriculum context

- Pupils and staff worked with artists, authors, engineers, soft furnishers and sign writers to set and realise a vision for a new learning space over the course of 18 months

- Curriculum content, key concepts, skills/ ways of thinking and processes embedded in the project activity and anchored, via collaborative planning, at multiple levels and via tools

- Development was supported via workshops and coaching

- Monitoring was systematic *and* informal. EG coaching foci used to secure progression

Effective curriculum innovation – Other ingredients from the research reviews

- **Contextualisation** of learning - connections between the curriculum, **home** and **community**

- Enabling ALL pupils to experience **challenge** and recovery from mistakes/ failures from the start

- Structured **group work/**effective **talk** to secure access

- Cumulative, **formative assessment** in which **pupils** are **active partners**

- **Aligning** curriculum,subject knowledge and professional development

- **Flexibility** to promote depth of **conceptual development** and transfer of learning **http://tinyurl.com/ccrvc8q**

Components linked to innovation

- Making links to **contextualise** the curriculum required schools and teachers to engage in and model creativity in making links

- **Flexibility** in curriculum helped connect concepts/ phenomena *promoted depth* in learning and developed the understanding of rationale/ theory: *which enabled informed adaptation*

- Teaching and structuring **collaboration** / group work expanded perspectives and possibilities

Continuing Professional development and learning (CPDL) and innovation

- Leadership of Curriculum Development depended *on* high quality Continuing Professional Development and Learning for teachers (CPDL) and was a powerful vehicle for it

- Here is a case study of a large, highly innovative secondary school where the deputy head leads the curriculum and uses CPDL as the key driver for change

- **http://tinyurl.com/p74wazo**

In effective curriculum development schools:

- Leaders aligned Curriculum and professional development with *informal* accountability systems increasing ownership and the transfer of learning
- Curriculum development became embedded at scale via *tools and resources*, mediated via CPD
- Developing/refining tools for specific groups of pupils/contexts and matching them to individual needs was part of CPD
- Tools included rubrics to systematise thinking
  - e.g. 'split screen thinking, templates, planning grids, audit tools, "habits of mind" for enacting core principles

Kenton an innovative secondary school

Corridor Art Work at Kenton

Art work at Kenton

Kenton – an innovative school

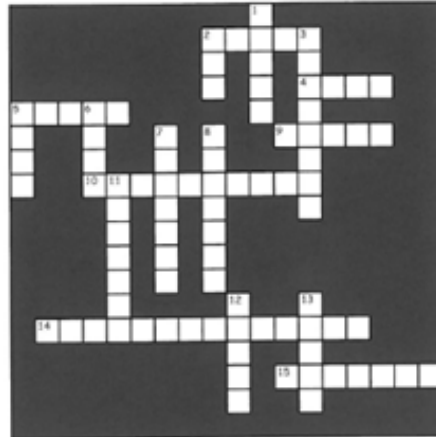# Kenton – an innovative school

The Seashore

Phonics | Vocab | Comprehension | Para/text structure

(A)

Match up the words below to the definitions in the crossword, then fill in the crossword.

stack · beach
cave · deposition · arch
groynes · transportation
shingle · cliff · erosion
coast · waves · tides · bay
headland · sand · seawall

Clues Across
2. An area of sand b......?
4. Rock rather like a gateway in the water.
5. Where the land meets the sea.
9. High costal rock face.
10. The depositing of beach material.
14. The movement of sand, shingle, etc to a different part of the coast.
15. Wall built to protect the land from the action of the sea.

Clues Down
1. Moving ridges of water - we see rolling onto the beach.
2. A concave area of beach between two headlands.
3. Area of land jutting into the sea.
5. A hollow in the rock face.
6. Grains of rock found at the seashore.
7. Man-made structures designed to prevent movement of sand.
8. Small stones.
11. The action of the sea wearing away rocks.
12. A column of rock standing in the sea.
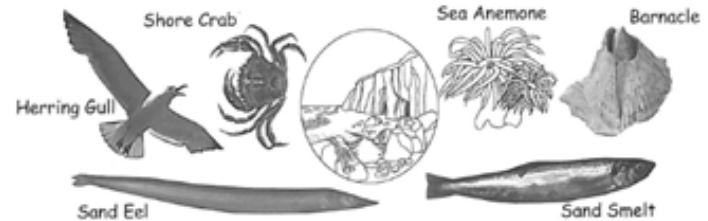13. The rise and fall of the sea resulting in two

(B) What makes the seashore a good HABITAT for these animals? Find out what the animals eat, and how they live and breed.

Shore Crab   Sea Anemone   Barnacle

Herring Gull

Sand Eel   Sand Smelt

....
....
....
....

(C) Now try this...
Choose an animal that you have observed in its habitat. Make notes and write a report about why the animal is suited to its habitat...

....
....
....

Kenton - innovation driven through Continuing Professional development and Learning (CPDL)

- CPDL leader leads a Professional Learning Programme (PLP)
- PLP via 2 hour mixed sessions and approaches each Wednesday plus 3 full day sessions,
- Research and Development groups eg re making learning independent
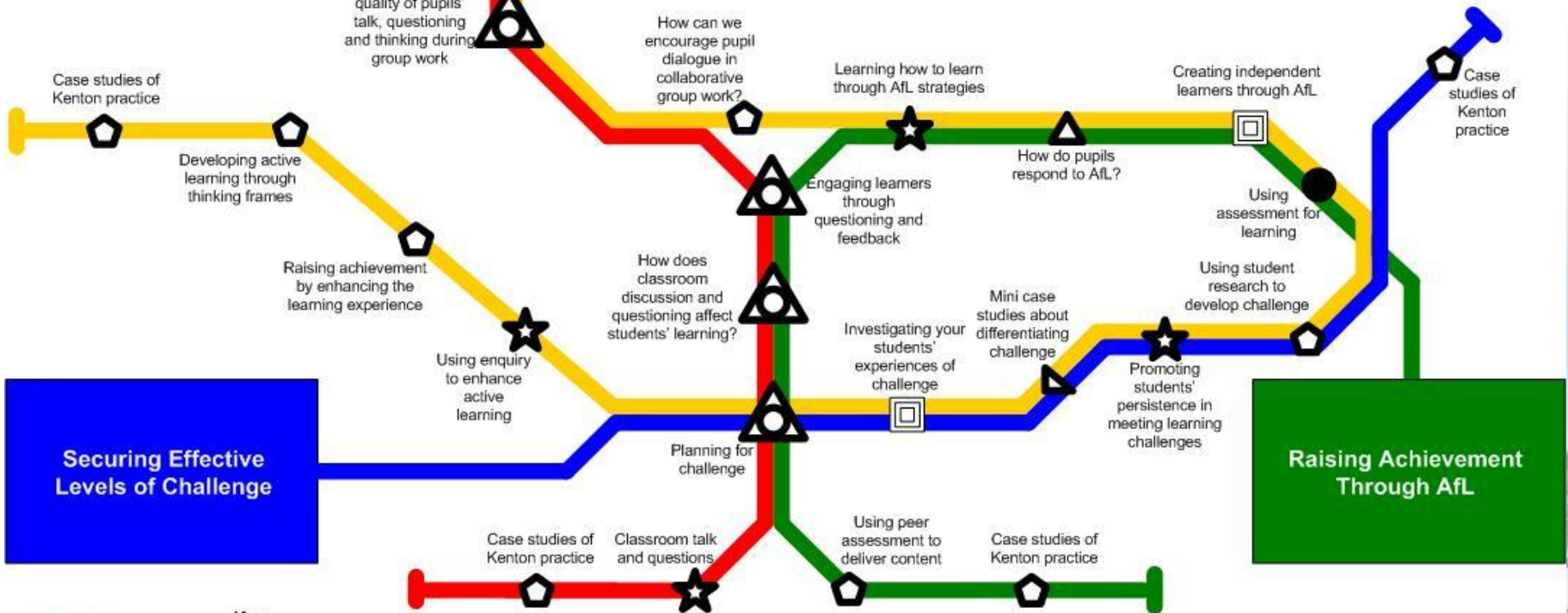- Extensive Masters level study

Kenton school

- All PLP including research underpinned by video based co-coaching for *all* staff
  - supported by trained co-coaching champions
  - practical micro enquiry tools and resources to secure quality embedded in a research route maps that create a pathway through wider knowledge base
- Staff choose activities, from varied programme, in context of specific goals and development projects
- Specialist expertise valued, evaluated and deployed
- Staff views valued and regularly researched too

http://www.curee.co.uk/block-content/route-maps-sample

Kenton school

- All PLP including research underpinned by video based co-coaching for *all* staff
  - supported by trained co-coaching champions
  - practical micro enquiry tools and resources to secure quality embedded in a research [route maps](#) that create a pathway through wider knowledge base
- Staff choose activities, from varied programme, in context of specific innovation goals and projects
- Specialist expertise valued, evaluated and deployed
- Staff views valued and regularly researched too

Effective CPDL - 8 Key Characteristics

- Use of specialist expertise especially via research evidence

- Peer support and professional dialogue rooted in evidence from experiments with new approaches

- Learning to learn from looking – focused enquiry/ observation skills

- Using aspirations for pupils as a starting point

- Developing theory and practice side by side

- The development and use of professional learning/enquiry tools

- Pro-activity – professional learning done *by* teachers (within a table d'hôte menu)

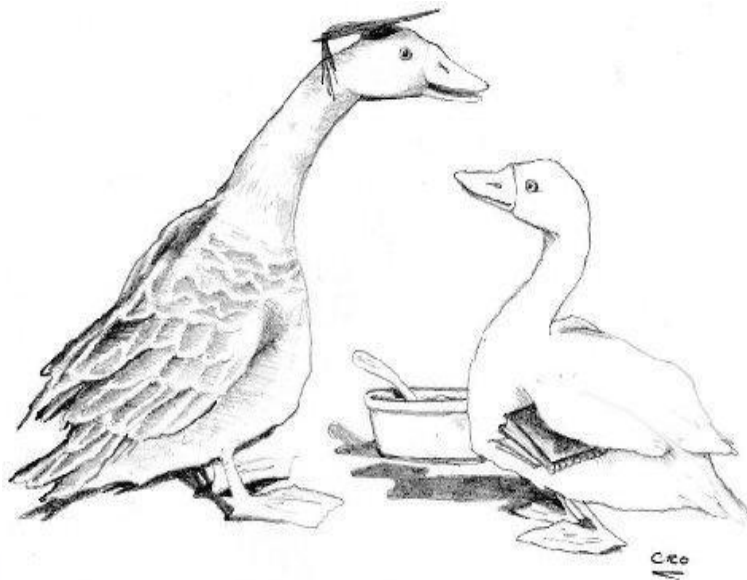- Leadership recognition and modeling

- http://eppi.ioe.ac.uk/cms/Default.aspx?tabid=2275

- http://www.educationcounts.govt.nz/publications/series/251

Mirroring/ modelling innovation at every level

- This evidence suggests that school and curriculum innovation need to model and mirror the innovation we want teachers to create for young people
- Teachers need a curriculum and pedagogy too
- What is sauce for the goose is sauce for the gander

http://www.curee.org.uk/content/sauce-goose-learning-entitlements-work-teachers-well-their-pupils

Kenton – an innovative school

Contact Details

philippa.cordingley@curee.co.uk

@PhilippaCcuree

www.curee.co.uk

Centre for the Use of Research and Evidence in Education

4 Copthall House

Station Square

Coventry CV1 2FL

England

024 7652 4036

Kenton – an innovative school

Languages

Vocab Grammar Spelling

We often want to communicate with others. If we cannot speak at all or simply cannot speak the other person's language, we have to find a different way of communicating with them. This could be by making particular noises, facial expressions, or gestures with parts of our body. In Chapter 5 when Michael met Kensuke for the first time, he realised that he had no idea what Kensuke was saying to him. Michael thought it sounded like Chinese or Japanese. However, he did know that Kensuke was agitated and angry with him.

Can you draw some expressions on these faces to show how the people are feeling?

Happy   Sad   Angry   Puzzled   Bored   Surprised

Write a sentence explaining how you would use your hand(s) to give these messages:

Pleased to meet you.

Come here, please.

Look at that!

Stop!

Quiet please!

You shouldn't do that!

Goodbye.

Now try this…

Make some strange faces by cutting out facial parts from pictures in magazines and sticking them together as a new face. Use an "Additional Page" at the back of the booklet.
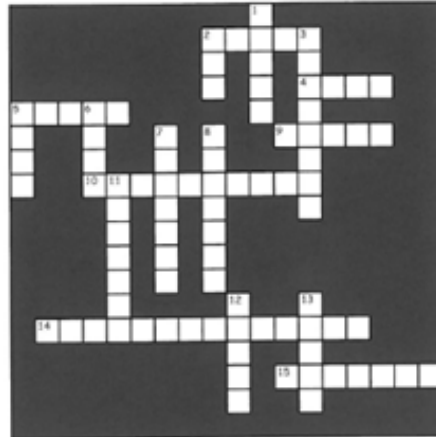
10

The Seashore

Phonics | Vocab | Comprehension | Para/text structure

(A)

Match up the words below to the definitions in the crossword, then fill in the crossword.

stack · beach
cave · deposition · arch
groynes · transportation
shingle · cliff · erosion
coast · waves · tides · bay
headland · sand · seawall

Clues Across

2. An area of sand b......?
4. Rock rather like a gateway in the water.
5. Where the land meets the sea.
9. High costal rock face.
10. The depositing of beach material.
14. The movement of sand, shingle, etc to a different part of the coast.
15. Wall built to protect the land from the action of the sea.

Clues Down

1. Moving ridges of water - we see rolling onto the beach.
2. A concave area of beach between two headlands.
3. Area of land jutting into the sea.
5. A hollow in the rock face.
6. Grains of rock found at the seashore.
7. Man-made structures designed to prevent movement of sand.
8. Small stones.
11. The action of the sea wearing away rocks.
12. A column of rock standing in the sea.
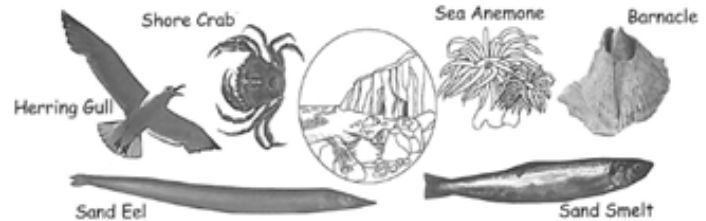13. The rise and fall of the sea resulting in two

(B) What makes the seashore a good HABITAT for these animals? Find out what the animals eat, and how they live and breed.

Shore Crab   Sea Anemone   Barnacle
Herring Gull
Sand Eel   Sand Smelt

(C) Now try this...
Choose an animal that you have observed in its habitat. Make notes and write a report about why the animal is suited to its habitat...

Kenton – an innovative school

Respond Creatively to Briefs

Design Brief

When young children go bed at night they often like the light on, this is because they are afraid of the dark. This is expensive solution to the problem and can also prevent other children getting to sleep.

A local retail store specialising in children's toys has asked you to design a product which will provide a small source of light to comfort children afraid of the dark.

Your design must meet the following requirements: appeal to young children, a simple design, battery powered & meet Health & Safety

Learning Pathways

Progress Step 1– Level 4
Develop question answering SKILLS - Cover a range of points.
SOME answers cover 2 different points
Develop question answering SKILLS - Justify your points.
SOME answers contain an explanation.
Literacy - WRITING : Develop; 'Spelling, 'Punctuation, 'Terminology & 'Grammar
FEW S errors, excellent use of T,G & P.
of project research considerations
Start to link sections and paragraphs together using different connectives. Use the literacy ladder to climb to level 4

Progress Step 2- Level 5
Develop question answering SKILLS - Cover a range of points.
MOST answers cover 2 different points
Develop question answering SKILLS - Justify your points.
MOST answers contain an explanation.
Literacy - WRITING : Develop; 'Spelling, 'Punctuation, 'Terminology & 'Grammar
SOME S errors, good use of T,G & P.
Use lots of different connectives to link ideas and make sure paragraphs follow on from each other . Use the literacy ladder to climb to level 5

Progress Step 3– Level 6
Develop question answering SKILLS - Cover a range of points.
ALL answers cover 2 different points
Develop question answering SKILLS - Justify your points.
ALL answers contain an explanation.
Literacy - WRITING : Develop; 'Spelling, 'Punctuation, 'Terminology & 'Grammar
FEW S errors, excellent use of T,G & P.
Check your own work to correct common spelling mistakes and grammar. .Use the literacy ladder to climb to level 6

Task ! Write out your Design Brief below

Extended writing

Literacy Objectives	Key Words

Reflection

The level that I think I have achieved is:

Because....

kenton

What you've done well

To improve you must

Pupil comment