

St Mary's University **Twickenham** London

Institute of Education

Royal Geographical Society

with IBG

Curriculum design

Geogra

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3 November 2020 7.00pm-8.30pm

Online secondary geography teachmeet

## **Sophie Wilson**

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The importance of Curriculum Design 4 Geography – 'Quality of Education'

\*curriculum, \*specialist knowledge, \*understanding and \*skills

+ emphasises importance of learning what as well as learning how....

## Gift of Education =

→ opportunity to pass on to the next generation our knowledge about the world - responsibility ..

It is our children's inheritance... Mark Enser

See: Young, Lambert, Roberts and Roberts: Knowledge and the Future School

'Every subject is on its own quest for truth' (Christine Counsell)

'What story do you want your curriculum to tell?' (Mark Esner)



## Thinking geographically

See: David Lambert

Tim Oates has suggested that 'curriculum'

has multiple meanings47:

- 1) What is meant by 'Curriculum'?
  - for a school?
  - for a subject?
  - for a lesson?

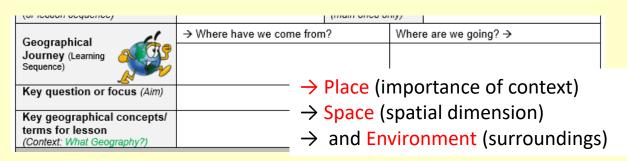
**Intended curriculum:** the required knowledge, skills and understanding that might be written down in the specification for a unit of study.

**Enacted curriculum:** the curriculum that students actually experience as delivered by their teachers, each teacher applying their own filter, adding or subtracting content, deploying a unique combination of learning tasks and resources.

Assessed curriculum: the knowledge, skills and understanding that students encounter in their assessments – normally a subset of a much wider curriculum.

**Learned curriculum:** the knowledge, skills and understanding that students are left with at a later time. (As referenced earlier, Nuthall's work suggests that this will be unique to each student in any class.)

→ Conceptual framework for relational thinking in geography (Geographical Journey)

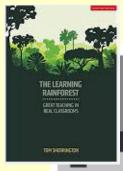


## Distinguishing curriculum from teaching and assessment

**Curriculum:** WHAT is taught

Teaching activities: HOW curriculum content is taught

Assessment
Desired high level outcomes
and measures of those
outcomes



## THE CURRICULUM DEBATE

**CHAPTER 3** 

WE WANT OUR CHILDREN TO HAVE IT ALL: KNOWLEDGE AND UNDERSTANDING ACROSS MULTIPLE DOMAINS; A RANGE OF PRACTICAL AND INTELLECTUAL SKILLS AND A RANGE OF CHARACTER TRAITS-RENAISSANCE PEOPLE.



WHAT WE TEACH AND HOW WE TEACH ARE INTERLINKED IN THE

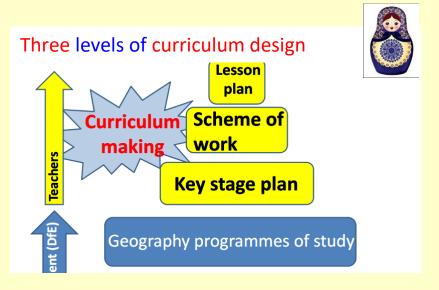
ENACTED CURRICULUM

CURRICULUM IS SPECIFIED IN
DIFFERENT WAYS BUT THERE IS
ALWAYS SOME ROOM FOR TEACHER
INPUT - OFTEN A LOT OF
FREEDOM TO CHOOSE THE BOOKS
AND HISTORICAL PERIODS THAT
STUDENTS STUDY.

THE CORE KNOWLEDGE DEBATE IS
VITAL-WHAT KNOWLEDGE
SHOULD ALL STUDENTS HAVE?
ANY SELECTION HAS CULTURAL
BIAS- SO WHAT DO WE INCLUDE
AND EXCLUDE?

CULTURAL CAPITAL NEEDS TO BE
TAUGHT DELIBERATELY-AND
SHOULD INCLUDE EXPERIENCES
LIKE CONCERTS, PLAYS, WALKING
IN MOUNTAINS, VISITING MUSEUMS
AND ENGAGING IN CURRENT
AFFAIRS.

BEYOND TEACHING 'THE BEST THAT'S BEEN THOUGHT AND SAID' WE'RE TRYING TO GIVE STUDENTS THE KNOWLEDGE TO ENGAGE IN 'THE CONVERSATION OF MANKIND.'



← Short- term = Teacher

← Medium term plan = School + Teacher

← Longer- term = National exams

→ YOU as the CURRICULUM MAKER.. more important than ever..

given school closures and constant disruption caused by COVID 19...

Curriculum given → exam board specifications – lesson plans ready made.. ...

- Sequence learning content material
  - ✓ Horizontal curriculum
  - ✓ Vertical curriculum
  - ✓ Spiral curriculum

#### Needs to be:

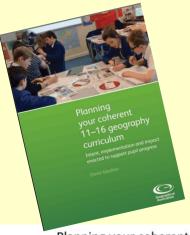
Logical... identify gaps....misconceptions addressed...

## Curriculum →

'What knowledge and understanding (intent)...

...a structure and narrative (implementation)...

...what knowledge and understanding pupils have gained (impact) ..





- Practical guidance via case-studies
- Explore questions of whose knowledge
- Understand the theory behind the curriculum

Planning your coherent geography curriculum 11-16 book structure

#### Curriculum design Theory

#### Chapter 1

School curriculum evolution in a centralized era What is the curriculum?

#### Chapter 2

School curriculum planning

- · Principles of design in geography · Impact of hyper-socialized
- school environment
- Ofsted research findings leading to definition of curriculum

#### Chapter 3

Progression and curriculum design

- · What is progression in geography - what does it look
- · Concepts and geographical thinking
- The curriculum and progression

#### Curriculum design

#### Guidance

#### Introduction

Big picture of the curriculum design process.

Chapter 4 Curriculum intent Stages 1-3

Chapter 5 Curriculum Intent Stage 4 designing the curriculum

Chapter 6 Curriculum Stage 5 Implementation The role of enquiry Fieldwork Assessment

#### Chapter 7

Curriculum Impact Stages 6&7 evaluation



#### Curriculum design

#### Practice

#### Chapter 8

Schools explain their curriculum design process

Fortismere School 11-18 mixed comprehensive, Muswells Hill, London.

Kirsty Holder Head of Geography

#### Spalding Grammar School,

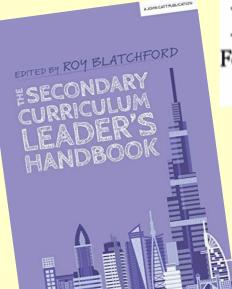
11-18 Boys South Lincolnshire. Dr Aidan Hesslewood, Head of Geography

#### Harris Academy, Wimbledon

Richard Maurice Assistant Principal Elizabeth Butler Lead Geography Consultant Harris Federation

#### Graveney School 11-18

Academy, Tooting, London Caiti Walter. Deputy Head of geography

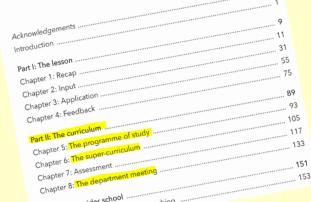


## **READ** For geography curriculum:

Contents

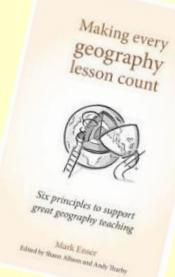
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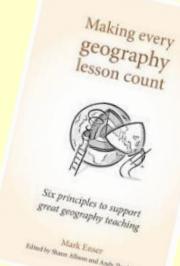


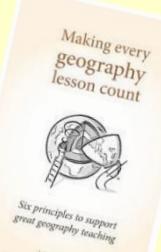


CONTENTS

Part III: The wider school ...... Chapter 9: Leaders supporting teaching .....







#### Expert teaching requires ...

#### Challenge

So that ...

Students have high expectations of what they can achieve

#### Explanation

So that ...

Students acquire new knowledge and skills

#### Modelling

So that ...

Students know how to apply the knowledge and skills

Students engage in deliberate practice

#### Questioning

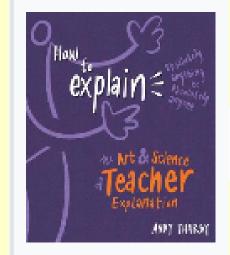
So that ...

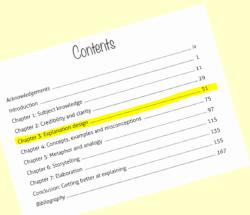
Students are made to think hard with breadth, depth and accuracy

#### Feedback

So that ...

Students think about and further develop their knowledge and skills





Learning

#### The Curriculum

An exploration of principles and practice in this important debate

#### Resources

The Curriculum Hopeful Schools High Challenge, Low Threat

#### Updates

School improvement updates

Mary Myatt's Blog Things I notice in schools

#### Conferences

Curriculum conversations

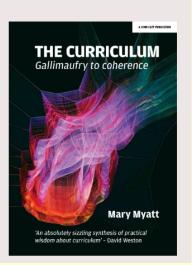
'Mary Myatt combines encyclopedic knowledge of schools with crystal-clear description of curriculum principles - a must-read for all those involved in improving education.

Globally, new attention is being given to curriculum principles and curriculum practice. Mary Myatt's book is major contribution to this debate. Few books range so effectively across curriculum theory and day-to-day practice in the classroom – Mary Myatt does this with huge authority and extreme clarity.'

Tim Oates CBE, Group Director of ARD, (Assessment Research and Development)

'This book weaves together theory, research, policy, and practice to provide educators at every stage of their career a practical guide to coherent curriculum design. Chapters

divided by subject and strategy make it easy to keep coming back to, whilst Mary's humorous and intelligent prose make it a pleasure

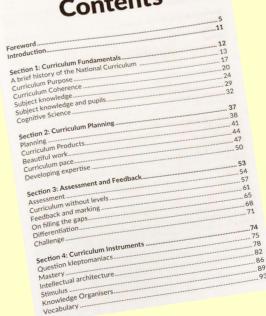


#### **Curriculum Planning**

'A good plan is like a road map; it shows the final destination and usually the best way to get there' H Stanley Judd

Updates Blog Resources Online Courses Online Courses

## Contents







Ten Thoughts On The Curriculum









RE Planning Unit

# Interweaving geography: retrieval, spacing and interleaving in the geography curriculum

#### Retrieval, spacing and interleaving

The advantages of retrieval practice in the classroom setting are well established. Since Ebbinghaus, writing in the nineteenth century (Ebbinghaus, 1885), we have been aware that interrupting the process of forgetting helps to make memories more durable; every time we bring something back from our long-term memory into our working memory, we make it easier to retrieve in the future.

A related concept is that of spaced practice. This is the idea that we can secure the advantages of retrieval practice by returning to things we have

'Trivial Pursuit view of geography' warned against by Peter Jackson (2006) while recognising the need to be knowledgeable about our world – in order, as he says, to think geographically.

Like many teachers, I have embraced retrieval practice in my classroom through the use of low-stakes quizzes at the start of lessons. I have found the most effective and efficient method to approach these is to put ten questions on a PowerPoint slide (with the questions drawn from previous topics as well as the one we are currently studying) and then putting the answers on the next one. Students can then quickly mark their

#### Interweaving

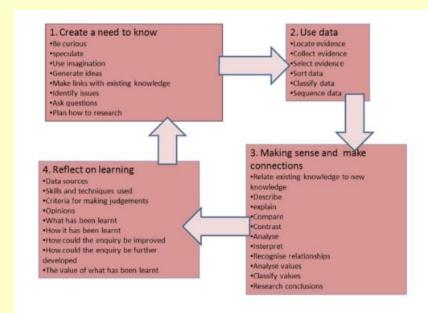
It was while reading Alex Standish's chapter on 'The place of regional geography' in *Debates in Secondary Geography* (2018) that it occurred to me there was a more natural way to accrue the benefits of retrieval and spaced practice in the curriculum: through the *interweaving* of regional and systematic geography. He distinguishes these approaches thus:

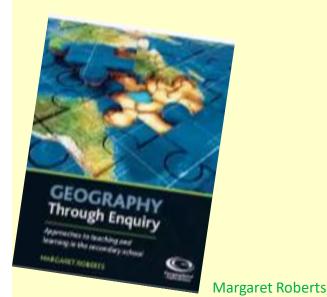
Systematic geography focuses on one geographical phenomenon or "layer" of the earth's surface at a time and explores how it varies with respect to other geographical layers. Regional geography examines the totality of geographical phenomena or layers, and how they are related, at a given locale or region. (Standish, 2018, p. 68)

#### Mark Enser

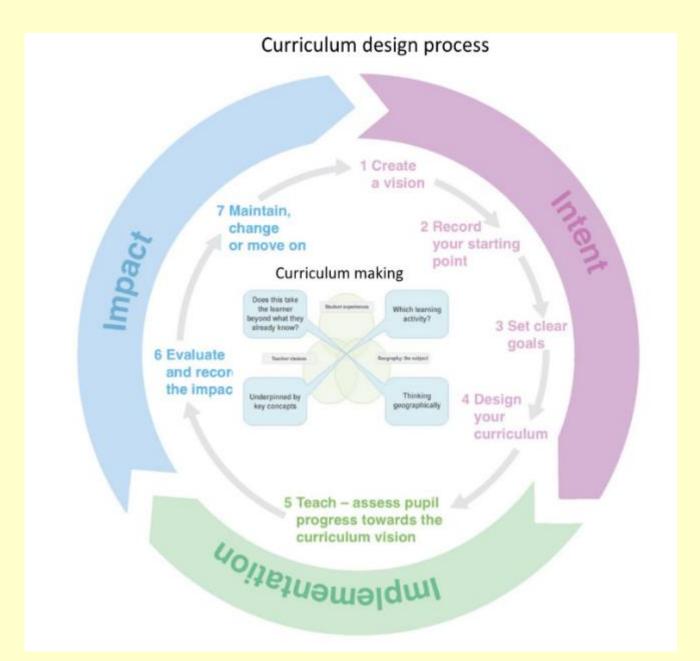
Mark describes how he has used retrieval, spacing and interleaving approaches to support meaningful learning in qeography.

Spring 2020 © Teaching Geography





https://www.geography.org.uk/Curriculum-Making-Through-Enquiry



## How are we going to teach it?

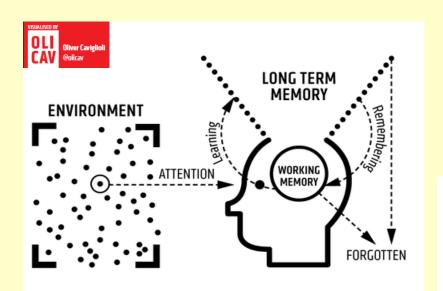
### Power of such a simple binary message:

- 1) Effective vs less-effective teachers
- 2) Drawn from 3 different sources of research:
  - cognitive science and how brain works
  - classroom observations of teachers' whose assessment tests made highest gains
  - Work on instructional methods for learning



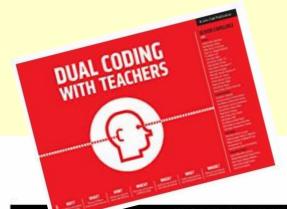


By Barak Rosenshine



## Simple model of how memory works:

- Working memory small/finite
- Long-term memory build schemata and retrieval of information





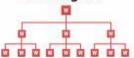
## KNOWLEDGE SCHEMA



## CONTAINER MODEL

#### CHUNK

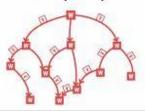
Tree Diagram



Mind Map



Concept Map

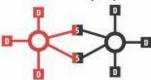


#### COMPARE

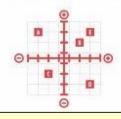
Venn Diagram



**Double Spray** 



**Crossed Continua** 



## PATH MODEL

#### SEQUENCE

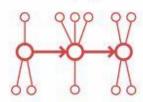
Flow Chart



Cycle



Flow Spray

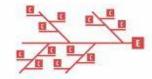


## CAUSE & EFFECT

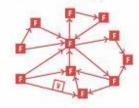
Input-Output Diagram



Fishbone Diagram

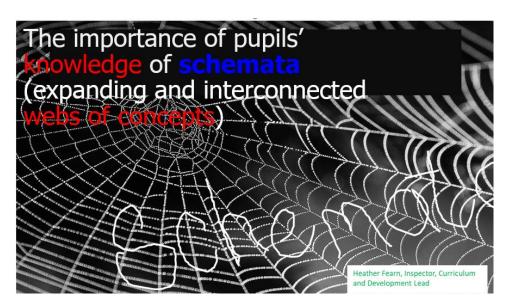


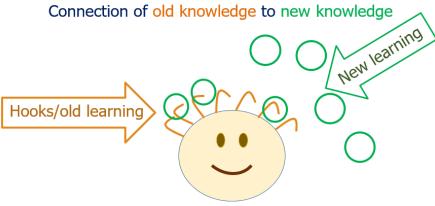
Relations Diagram



## Knowledge is generative (sticky)...



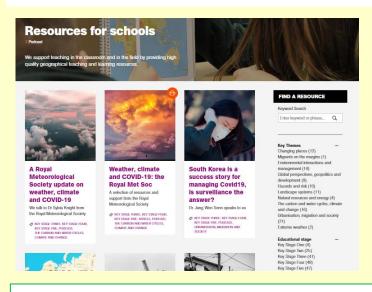




Understanding
deepens as
structures of
knowledge stored
in long-term
memory become
increasingly
complex

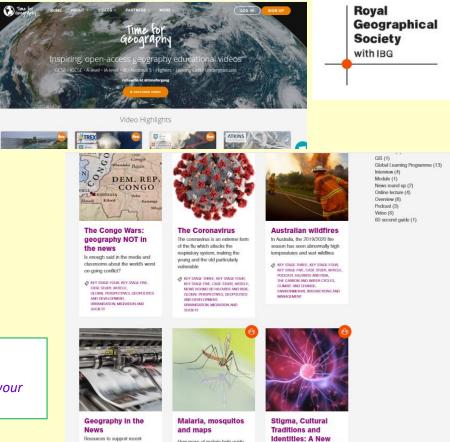


## Importance of selecting the right resources



The Royal Geographical Society (with IBG) https://www.rgs.org/schools/teaching-resources/geography-at-home/

Geography at Home - use to find some suitable resources to integrate into your scheme of work



How maps of malaria help guide

policymakers and illuminat

Geography of Health

geographical stories in the press

- •Podcasts focusing on topics from wildfires, weather and the high street to plate tectonics, cities and the carbon cycle. These are perfect for your students to listen to current geographical themes and keep up to date with their subject knowledge.
- •A wide range of articles and case studies based on geography in the news these link directly to specification content and can help your students to read around topics presented in your online lessons.
- Our catalogue of online lectures by leading geographical experts for you and your students to watch, some of which are supported by resources that can be used to teach a lesson based on the lecture.
  - •Use this opportunity to get to grips with GIS and pre-plan some lesson content to use with your students. We have a range of support for GIS, plus some information about using data sets.

## Geography Reading List



#### Prisoners of Geography Tim Marshall

Splitting the world into 10 distinct regions suggests our key political driver continues to be our physical geography. It includes why China and India will never fall into conflict. One of the best books about geopolitics you could imagine!



#### Factfulness Hans Rosling

A radical new explanation of why we systematically get the answers to questions about development, revealing ten instincts that distort our perspective. Sweeps aside our worst instincts and makes the world a sunnier place.



#### The Almighty Dollar Dharshini David

Follows \$1 from a shopping trip in Texas, via China's central bank, Nigerian railroads, the oilfields of Iraq and beyond to reveal the complex relationships of our new globalised world.



PARTY CHARGO

#### Connectography Parag Khanna

A guide through the emerging global network civilisation in which megacities complete over connectivity and borders are increasingly irrelevant. Shows how a new foundation of connectivity is pulling logether a world that appears to be falling aport.



#### Divided Tim Marshall

There are many reasons why we erect walls, because we are divided in many ways: wealth, race, religion, politics. Understanding what has divided us, past and present, is essential to understanding much of what's going on in the world today.



#### Off the Map Alastair Bonnett

From forgotten enclaves to floating islands, from hidden villages to New York gutter spaces, this book charts the hidden corners of our planet. Topophilia, the love of place, is a fundamental part of what it is to be human.



#### The Silk Roads Peter Frankopan

Our understanding of the world is shaped by the narrow focus on western Europe and the US. An antidate to Eurocentric accounts of the world, examining several continents and centuries and the factors that influenced the flow of goods and



#### Worth Dying For Tim Marshall

The histories, the power and the politics of the symbols that unite and divide us. We wave them and burn them and still, in the 21st century, we die for them. We need to understand the symbols that people are rallying around.



#### Adventures in the Anthropocene Gaia Vince

Our planet is said to be crossing into the Age of Humans. This book sees what life is really like for people on the frontline of the planet we've made, from artificial glaciers to electrified reets.



#### 10 Billion Stephen Emmott

It's about our failure: failure as individuals, the failure of business and the failure of our politicians. It is about an unprecedented planetary emergency. It's about the future of us.



#### The Bottom Billion Paul Collier

Explains four traps that prevent the homelands of the world's billion poorest people from growing and receiving the benefits of globalisation - civil war, natural resources, being landlocks and ineffective governance.



#### 10 Billion Danny Dorling

Explores how we got to 10 billion and the key issues that we face in the coming decades including how to deal with scarcity of resources and how our cities will grow and how we should prepare for population decline.



#### Peoplequake Fred Pearce

The population bomb is being defused. Half the world's women are having two children or fewer and within a generation, the world's population will be falling, and we will all be getting very old. This book confronts our demographic demons.

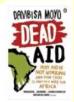


#### This is the Way the World Ends Jeff Nesbit

Our world is in trouble - right now. This book tells the real stories of the substantial impacts to Earth's systems unfolding across each continent from longer droughts in the Middle East to the monsoon season shrinking in India. A blueprint for real-time, workable solutions we can tackle together.

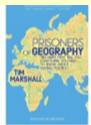


FRED PEARCE



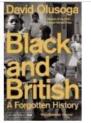
Explicitly referenced in our Key Stage 5:





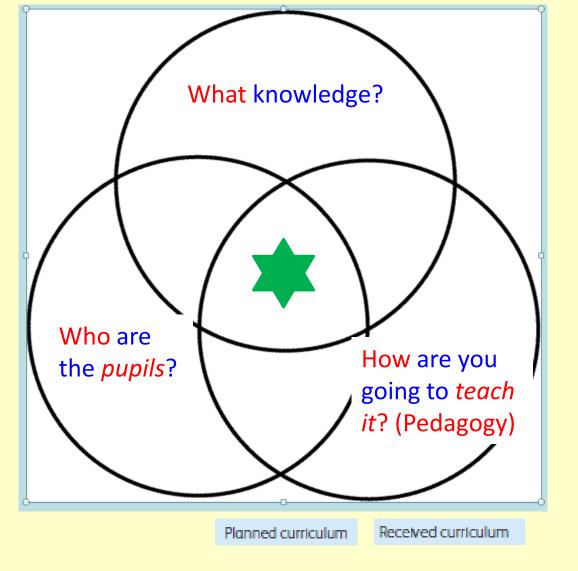








Twyford Church of England High School





All comes together around the notion of

YOU

as the

Curriculum Maker



Share your learning by teaching others'

## You as Curriculum Maker

keep a balance between

Curriculum (What)

+

Pedagogy (How)



Curriculum design 4 Geography is key to subject knowledge development

## Sophie Wilson

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