



Day 3 8.9.25

Curriculum Principles

Secondary Geography



Prifysgol Cymru
Y Drindod Dewi Sant
University of Wales
Trinity Saint David

Yr Athrofa
Centre for Education
Addysg i Gymru | Education for Wales



What are you thinking?



How are you feeling?



What are your next actions?





- Identify and understand the key components of Curriculum for Wales
- Consider what the Four Purposes may 'look like' in the Geography classroom
- Reflect on the importance of understanding and teaching 'key concepts' in Geography and how this will drive progress in learning
- Audit personal Geography knowledge



Curriculum for Wales

INTRODUCTION

STATEMENTS OF WHAT MATTERS

PRINCIPLES OF PROGRESSION

DESCRIPTIONS OF LEARNING

DESIGNING YOUR CURRICULUM

Within each Area

1. Increasing breadth and depth of knowledge
2. Deepening understanding of the ideas and discipline within AOLE
3. Refinement and growing sophistication in the use and application of skills
4. Making connections and transferring learning to new contexts
5. Increasing effectiveness as a learner

• Cross Curricular Skills

Literacy / Numeracy / Digital Competence

• Integral Skills

Creating & Innovation / Critical Thinking & Problem Solving / Personal Effectiveness / Planning and Organising

• Cross cutting themes

Local, national, international context / Careers & Work Related Experiences / Human Rights / Diversity / RSE

• Links with other Area

6 Areas of Learning and Experience

• Specifics of this Area

Key Concepts, Skills and Substantive knowledge



Statements of What Matters

1. Enquiry, exploration and investigation inspire curiosity about the world, its past, present and future. <i>...questioning, evidence, evaluation, ethics and judgements.</i>	• Be curious, question, think critically, reflect. • New and creative thinking • Local, national and Global contexts • Gather, justify, present, analyse and evaluate discoveries. • Draw informed conclusions
2. Events and human experiences are complex, and are perceived, interpreted and represented in different ways. <i>...seeking meaning, making judgements, ultimate and philosophical questions, representations, perspectives, interpretations, significance and validity.</i>	• Critically review events and experiences and how they are perceived, interpreted, and represented. • Develop informed viewpoints and self-awareness. • Appreciation of how context can influence the construction of narratives and representations. • Evaluate the validity of evidence on representations of contexts.
3. Our natural world is diverse and dynamic, influenced by processes and human actions. <i>...interrelationships between humans and the natural world, cause and effect, change and continuity, significance, place space and physical processes.</i>	• Cultivates a sense of place and a sense of belonging – cynefin. • Understand and appreciate how and why places, landscapes, and environments are changing. • Interactions between humans and the environment. • Make connections between the past, present, and possible futures.
4. Human societies are complex and diverse, and shaped by human actions and beliefs. <i>...chronology, change and continuity, diversity, cause and effect, interconnectedness, community, identity and belonging, authority and governance.</i>	• Learners develop their own identity and an awareness of how they can shape the communities they live in. • The story of the wider world and the diverse nature of societies. • Continuity and change driven by environmental, economic, social, political and cultural processes, human actions, religious and non-religious beliefs, and worldviews. • Connections and interdependence of societies in a globalised world – tolerance and empathy for beliefs, values, traditions and ethics.
5. Informed, self-aware citizens engage with the challenges and opportunities that face humanity and are able to take considered and ethical action. <i>...citizenship, authority and governance, interconnectedness, justice and equality, enterprise, rights, responsibility and social justice.</i>	• Active, informed, responsible citizens and consumers who can contribute to their communities. • Interconnected nature of economic, environmental and social sustainability. • Contributes to a fair and inclusive society that confronts and addresses racism. • Awareness of their own rights, needs, concerns, and feelings. • Consider the impact of their actions when making choices and are able to justify their decisions. • Take committed social action.

INTEGRAL SKILLS

CREATIVITY AND INNOVATION

01

- be curious and inquisitive
- generate ideas
- explore and justify alternate solutions
- identify opportunities
- communicate different strategies



CRITICAL THINKING AND PROBLEM SOLVING

02

- ask meaningful questions
- evaluate information
- justify possible solutions
- identify potential problems
- be objective in decision-making
- develop arguments



PERSONAL EFFECTIVENESS

03

- develop emotional intelligence
- be confident and independent
- opportunities to debate and discuss
- aware of social, cultural, ethical and legal implications of their arguments
- evaluate their learning
- be responsible and reliable



PLANNING AND ORGANISING

04

- set goals, make decisions and monitor results
- reflect and adapt
- manage time, people and resources
- check for accuracy
- appreciation of sustainable development
- awareness of technological advances
- confident to work in uncertain situations
- resilient strategies to manage wellbeing



KS1

- Simple geographical vocabulary
- Recognise straightforward characteristics and patterns
- Eg seasons, houses

KS2

- Description of physical and human features
- Beginning to explain the relationship between physical and human features
- Eg resources, economic activity

KS3

- Begin to draw out the processes that lie behind the patterns, places and environment
- Introduce depth as well as breadth of study
- Eg city study, country study

GCSE

- More complex processes and interactions at all scales
- Dynamic and continuously evolving processes
- Eg physical and socio-economic processes

A Level

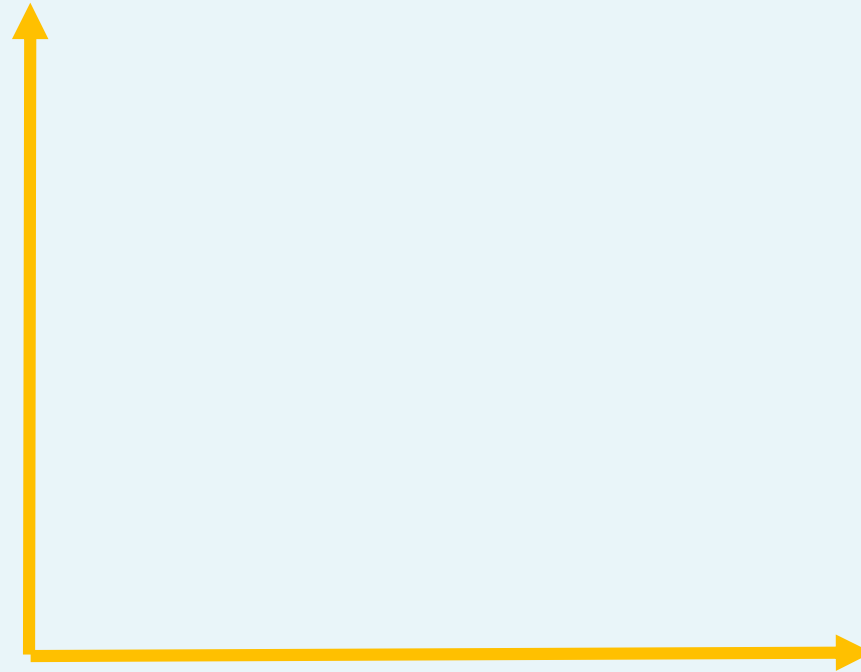
- Study more complex systems
- Aware of the increasingly globalised and politicised nature of the processes

Continuity within the Geography curriculum



Knowledge of an academic subject (Berstein 2006)

Vertical or
Hierarchical
subject
knowledge

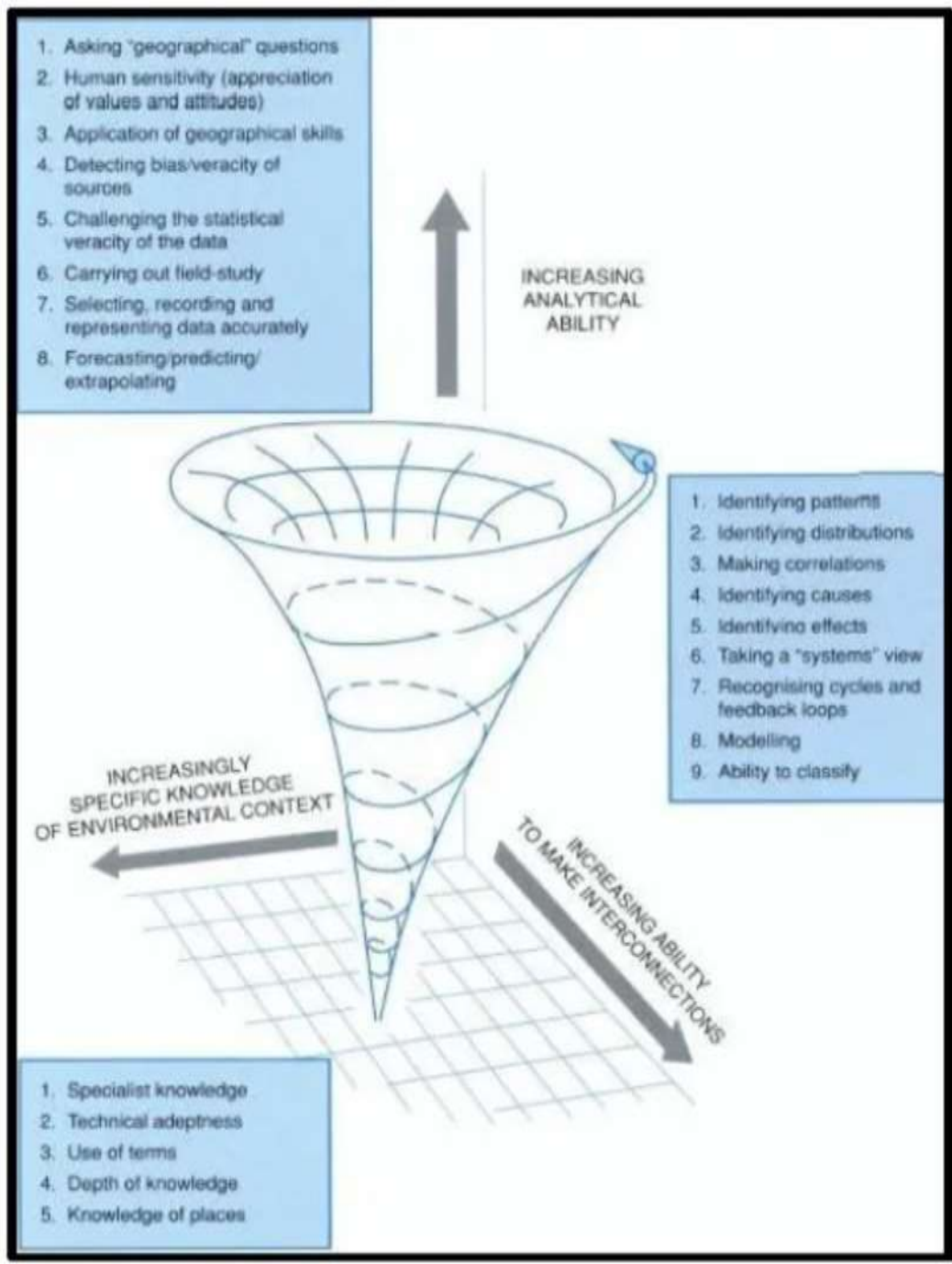


Horizontal subject knowledge

"Revisiting should not be merely 'repeating' " Day (1995)

Look at the diagram from Day (1995) you can see the spiral nature of curriculum continuity to enable progression.

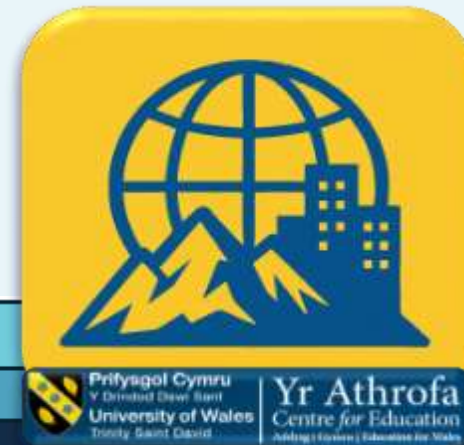
This is one teacher's personal image of the three dimensions he aims to develop in his students – specific knowledge, analytical ability and making interconnections.





What do the Four Purposes 'look like'
in Geography?

Look below the 'headlines'

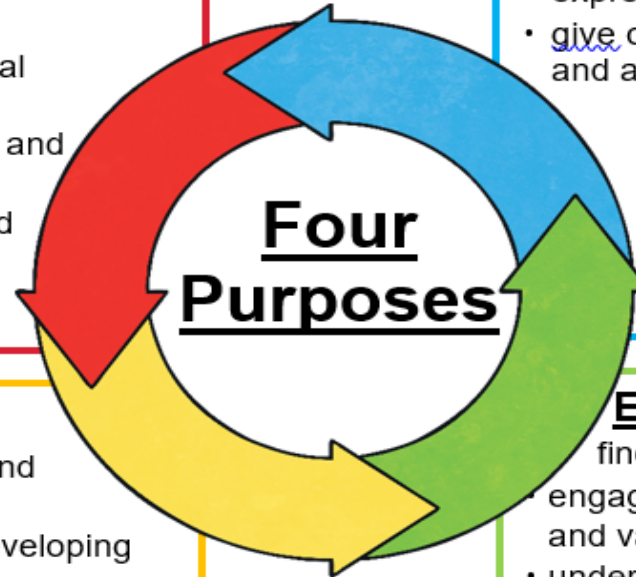


Ambitious, capable learners who:

- set themselves high standards and seek and enjoy challenge;
- are building up a body of knowledge and have the skills to connect and apply that knowledge in different contexts;
- are questioning and enjoy solving problems;
- can communicate effectively in different forms and settings, using both Welsh and English;
- can explain the ideas and concepts they are learning about;
- can use number effectively in different contexts;
- understand how to interpret data and apply mathematical concepts;
- use digital technologies creatively to communicate, find and analyse information;
- undertake research and evaluate critically what they find and are ready to learn throughout their lives.

Enterprising, creative contributors who:

- connect and apply their knowledge and skills to create ideas and products;
- think creatively to reframe and solve problems;
- identify and grasp opportunities;
- take measured risks;
- lead and play different roles in teams effectively and responsibly;
- express ideas and emotions through different media;
- give of their energy and skills so that other people will benefit and are ready to play a full part in life and work.



Healthy, confident individuals who:

- have secure values and are establishing their spiritual and ethical beliefs;
- are building their mental and emotional well-being by developing confidence, resilience and empathy;
- apply knowledge about the impact of diet and exercise on physical and mental health in their daily lives;
- know how to find the information and support to keep safe and take part in physical activity;
- take measured decisions about lifestyle and manage risk;
- have the confidence to participate in performance;
- form positive relationships based upon trust and mutual respect - face and overcome challenge;
- have the skills and knowledge to manage everyday life as independently as they can;
- and are ready to lead fulfilling lives as valued members of society.

Ethical, informed citizens who:

- find, evaluate and use evidence in forming views;
- engage with contemporary issues based upon their knowledge and values;
- understand and exercise their human and democratic responsibilities and rights;
- understand and consider the impact of their actions when making choices and acting;
- are knowledgeable about their culture, community, society and the world, now and in the past;
- respect the needs and rights of others, as a member of a diverse society;
- show their commitment to the sustainability of the planet and are ready to be citizens of Wales and the world.



"It is teachers who breathe life into the prescribed curriculum, making geography accessible and interesting for students?"

Mary Biddulph, 2017

How do you decide **what** to teach?

Are there important '**concepts**' that students need to meet repeatedly to ensure progression and development of understanding?



Overarching
concepts:-

PLACE, SPACE, SCALE

Organising
concepts:-

TIME, SCALE, DIVERSITY, FLOWS, PATTERNS,
INTERCONNECTION, INTERPRETATION

Threshold
concepts:-

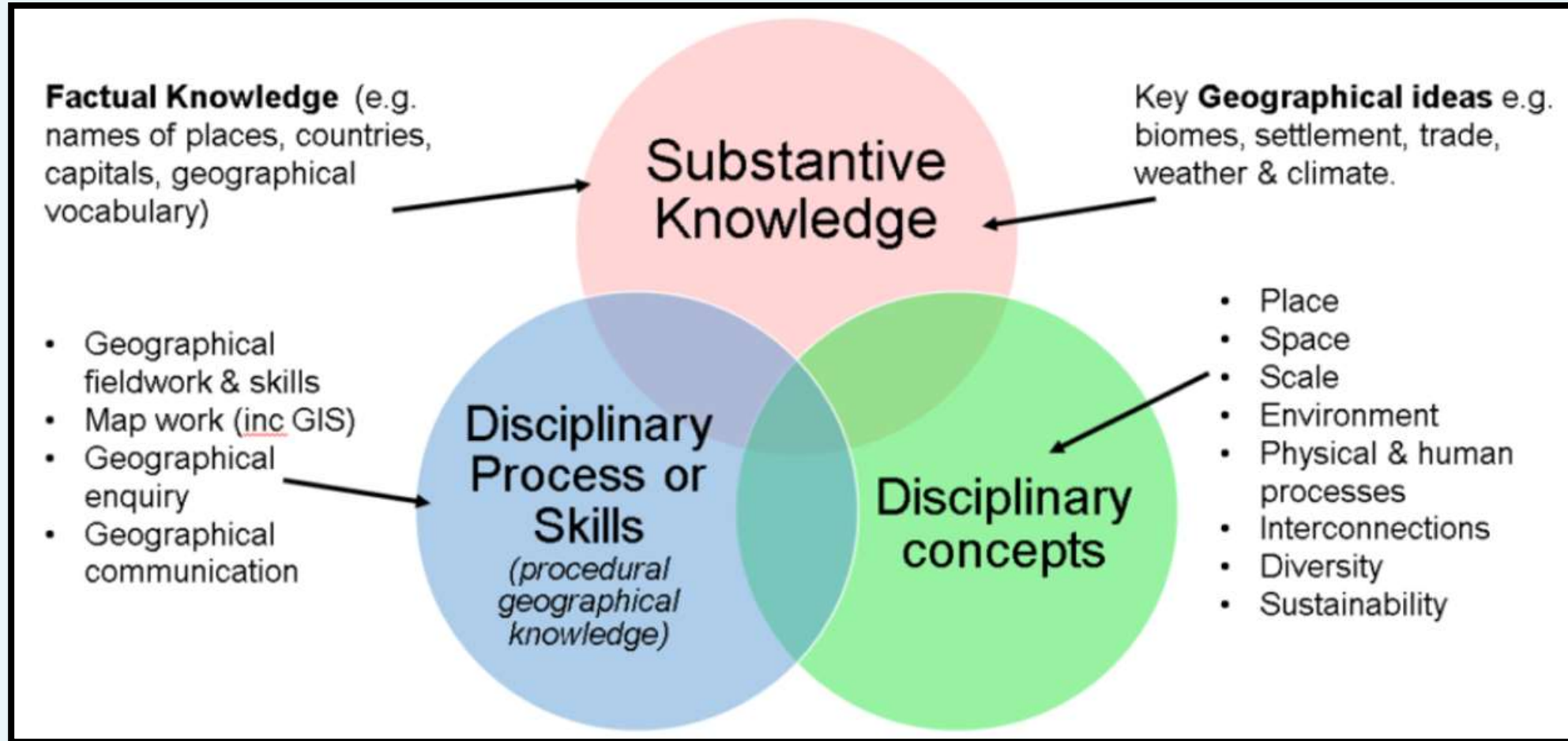
SUSTAINABILITY, GLOBALISATION,
INTERDEPENDENCE

Substantive
concepts:-

EROSION, CLIMATE,
ECOSYSTEMS, URBANISATION



Different types of knowledge

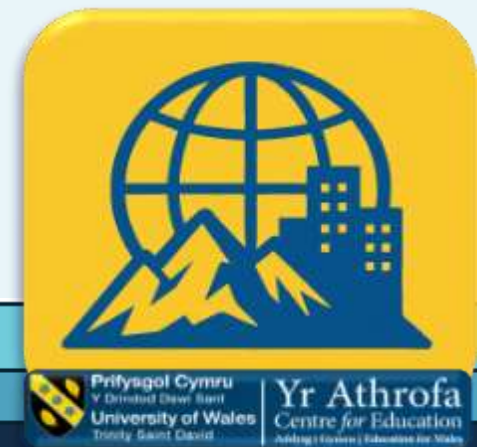


PLACE

Every place has a particular location and a unique set of physical and human characteristics. Furthermore, the same place can be represented differently. What we think about places is both shaped by, and shapes, our 'geographical imagination'.

Unique
Represented
Dynamic
Geographical
imagination

[TTIS Concepts of Place Space and Scale.pdf](#)



SPACE

Most phenomena (e.g. physical features, people, services, goods) are located and distributed in space. They have relative locations to each other and often interact with each other across space. Any flows or movements between these phenomena create patterns and networks. Spatial patterns, distributions and networks can be described and analysed, and often explained by reference to social, economic, environmental and political processes.

Location

Networks +
distribution

Flows

Territory

Spatially aware



SCALE

Scale influences the way we represent what we see or experience. We can construct different resolutions of scale from the personal, local and regional to the global. In between, we have the national and international scales – very important politically, and a huge influence on the identity of individuals and groups. Choice of scale is therefore important in geographical enquiry, as is the realisation that scale resolutions are interconnected.



‘To learn to think like geographers, students need to be able to use its vast conceptual language. We cannot think or communicate with each other without using its concepts.’

Margaret Roberts (2023)

It is through repeated encounters with key and substantive concepts, applied at a range of scales in different local, national and global contexts, that students deepen their conceptual understanding.

A concept cannot just be memorised, it has to be understood.

Students need to be introduced to how a concept is used in different contexts. Expect their understanding to develop gradually and realise that it cannot be rushed. Don't expect to teach a concept only once.



Renshaw and Wood (2011) identify that an extended period of exposure to 'difficult' concepts is required for students so they have time and space to grapple with these concepts.

'unstable space in which the learner may oscillate between old and emergent understandings' Cousin (2006)



Students need a
Liminal space



How Students can Maximise their Learning

A Generative Learning Approach



Summarising



Breaking down complex material into easy to read, abridged notes. Summarising Key content.

Mapping



Creating a flow chart, concept map or graphic organiser to explain links with more complex material.

Drawing



Drawing an illustration to compliment a written piece of work, or drawing to explain a set of instructions or connections

Imagining



Creating a mental image for a piece of work, how it will look or happen. Visualising before carrying out the action, physical or mental process.

Self-Testing



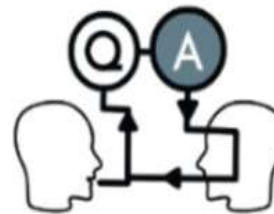
Recall and retrieving all you know about a topic, through writing or mapping. Testing through low stakes quizzes.

Self-Explaining



Elaborating (explaining) how and why. Breaking down work with examples or processes that lead to an answer.

Teaching



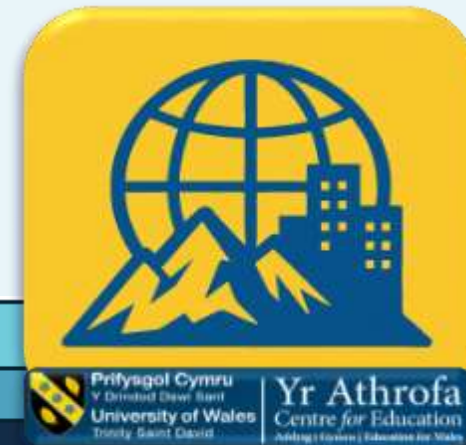
Teaching or explaining to a peer on their knowledge of a topic. Questioning and guiding, building your own topic knowledge.

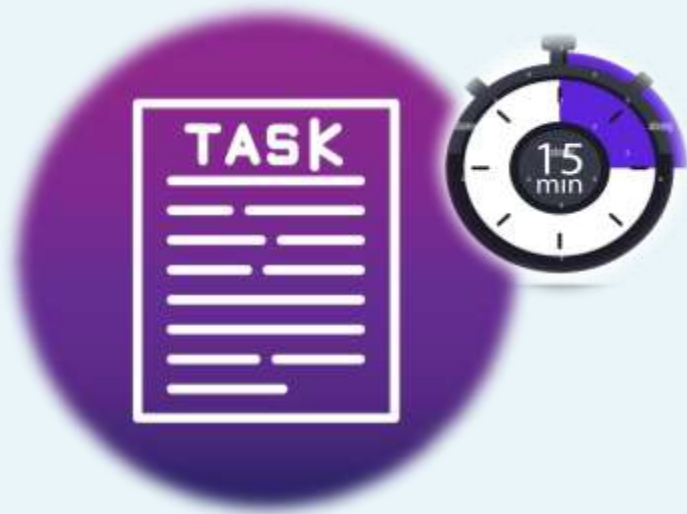
Enacting



Using aides/prompts to complete a task. Working through a problem with visual or mental clues to help solve the problem or learn the method.

Fiorella and Mayer (2015)





Personal Knowledge Audit

- Focus for subject development



Geographical Association

Become a geography teacher
Geography subject audit

Use the following grid to identify where you need to address subject knowledge

Topic	Excellent (University Specialism)	Good (A level/1 st year undergraduate)	Average (studied at GCSE /O level)	Poor (Never studied)
Changing Places				
Climate change and global warming				
Coasts – landforms, management				
Crime				
Development geography				
Drylands				
Economic geography - including agriculture, industrial change, transport, trade				
Ecosystems/Biomes				
Energy				
Environmental issues				
Food				
Geology and geological timescales				
Geomorphology - weathering and erosion				
Glaciation/cold environments				
Globalisation				
Health and Welfare				
Hydrology and flooding				
Leisure, tourism and recreation				
Natural Hazards				
Population and Migration				
Poverty				
Resource Management				
Retail				
Rivers – processes and landforms				
Urban and Rural geography				
Settlement patterns and processes				
Soils				
Sustainable Development				
Tectonic Activity				
Water and carbon cycles				
Weather & climate				
Geographical skills:				
Using quantitative data				
Using qualitative data				
Enquiry and research				
Mapping skills (including GIS)				
Fieldwork techniques, including measurement and questionnaires				

(based on the audit used by PGCE geography, University of Brighton)



What next?

Checklist:

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