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Towards Excellence

Welcome to the GwE 2015 National Conference

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Professor Graham Donaldson



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Successful Futures – Report on the Curriculum and Assessment Arrangements in Wales

Professor Graham Donaldson CB

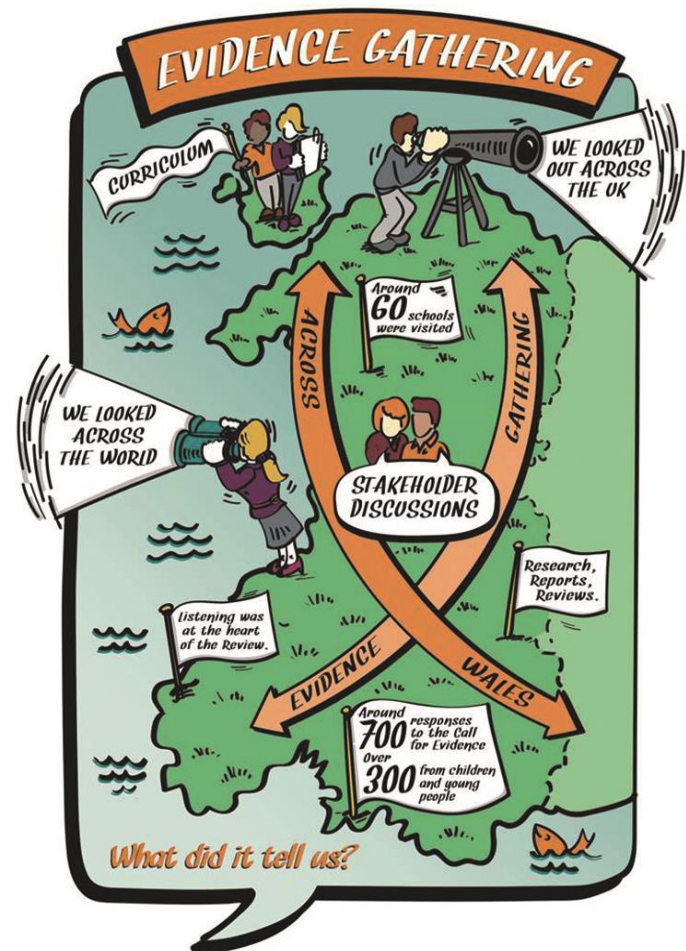
Remit of the Review

- › Fundamental
- › Independent
- › 3-16+

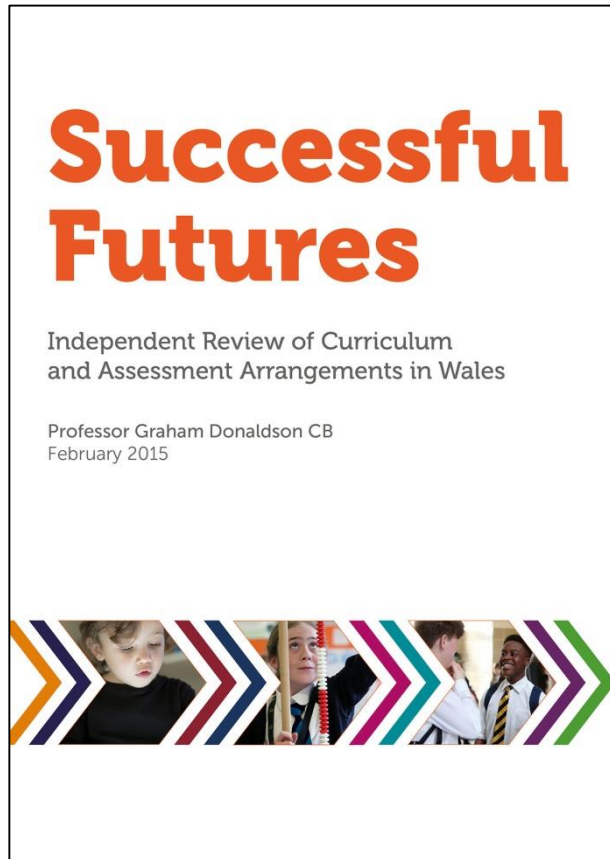
Evidence gathering

What does Wales need and want from its schools?
What can we learn from elsewhere?

- › Visited around 60 schools and other settings
 - › Undertook widespread engagement
 - › Over 700 responses to the
 - › Call for Evidence
 - › International experience
- Research and good practice.



The case for change

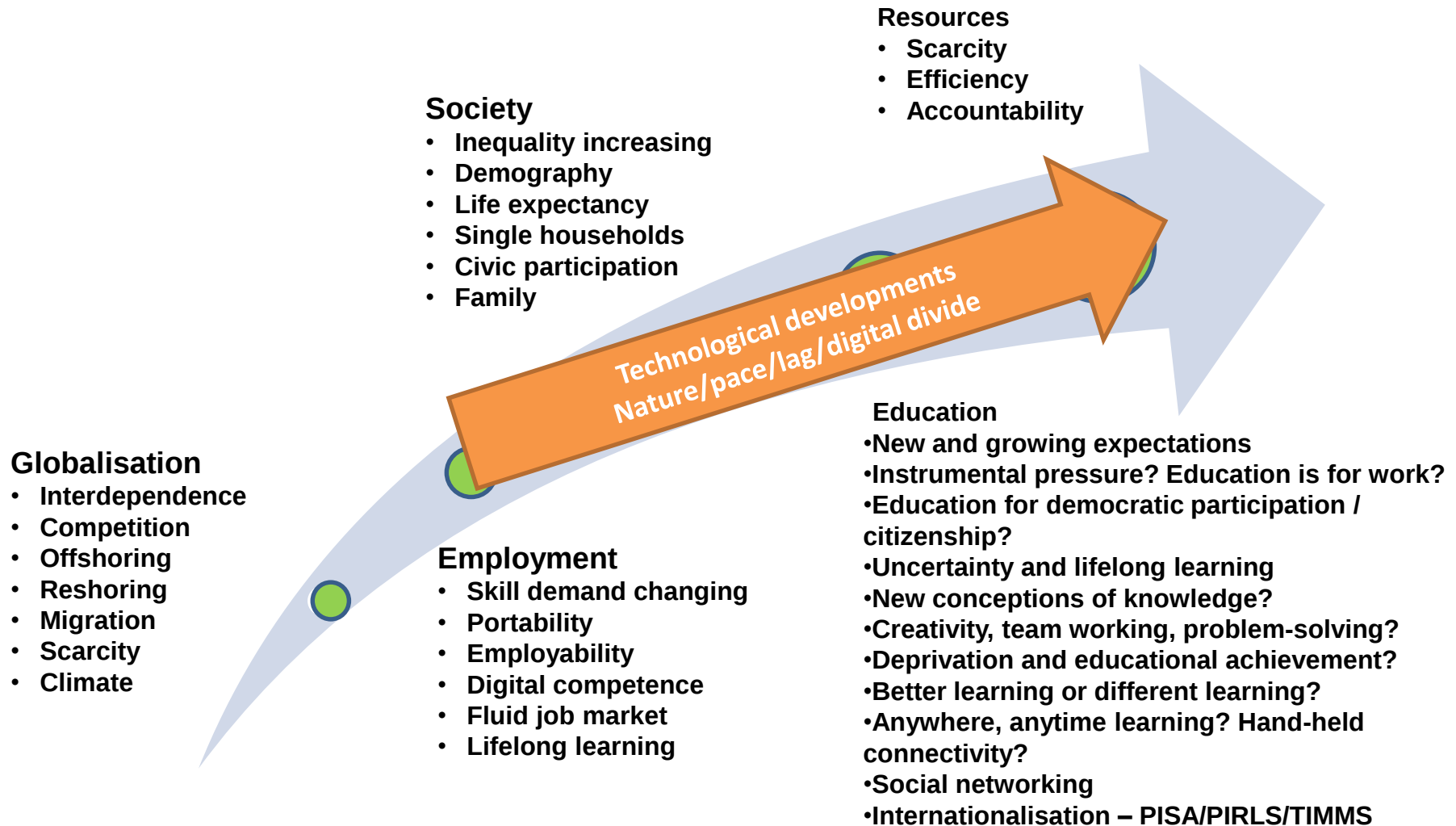


- “There was a recurring view that the curriculum had become unwieldy, overcrowded and atomistic, and that it was inhibiting opportunities to apply learning more holistically in ‘real life’ situations, or to use that learning creatively to address issues that cross subject boundaries.”
- “...the current national curriculum and assessment arrangements no longer meet the needs of the children and young people of Wales. The case for fundamental change is powerful.”
- Need to create forward-looking curriculum for 21st Century and beyond.

The origins of our current curriculum lie in the Education Act 1988 – Its conception took place in a very different world.

- Before the world-wide web
- Before the universal mobile phone
- Before PowerPoint
- Before the fall of the Berlin Wall
- High inflation and high interest rates
- Climate issues only beginning to be raised – ozone layer
- Few coffee shops/majority smoked

The World is Changing Fast



Average is over

- “This maxim (average is over) will apply to the quality of your job, to your earnings, to where you live, to your education, and to the education of your children...if **you and your skills are a complement to the computer**, your wage and labour market prospects are likely to be cheery...” (pages 4/5)
- “...a modern textile mill employs a man and a dog – the man to feed the dog and the dog to keep the man away from the machines.” (page 8)
- “The ability to **mix technical knowledge with solving real-world problems** is the key...” (page 21)
- “It might be called the age of genius machines, and it will be the people that work with them that will rise...we (will have) produced two nations, a fantastically successful nation , working in the technologically dynamic sectors, and **everyone else**.”

Improvement policies (Schleicher -OECD)

The past

The most effective systems

Student inclusion

Some students learn at high levels

All students learn at high levels

Curriculum, instruction and assessment

Routine cognitive skills for lifetime jobs

Learning to learn, complex ways of thinking, ways of working

Teacher quality

Taught to teach established content

High-level professional knowledge workers

Work organisation

'Tayloristic', hierarchical

Flat, collegial, differentiated and diverse careers

Accountability

Primarily to authorities

Also to peers and stakeholders

Six Big Messages

- › Compelling case for fundamental change
- › Mobilise around clear and compelling overall vision – be clear about what matters – structures should follow not lead
- › Don't make the complex complicated – It's the teaching that counts
- › Encourage coherence - clear lines of sight - minimise transitions
- › Balance consolidation and pace in learning
- › Assessment and accountability are for learning

The challenge

*“What our children and young people learn during their time at school has **never been more important** yet, at the same time, the task of determining what that learning should be has **never been more challenging.**”*



Strategic approach

To carry out its responsibilities, the Review has sought to identify clearly:

- the aspirations of the people of Wales for their schools
- the principles which should govern the design of the curriculum
- the purposes of the curriculum
- the way the curriculum can best be organised and described to meet those purposes and principles
- the implications for teaching and learning of proposals for change
- the role of assessment in both helping to achieve the purposes of the curriculum and in determining how far the purposes are being met
- the implications for teacher capacity, systems of accountability and other drivers of educational quality
- the ways in which the proposals arising from the Review might best be implemented, including the balance to be struck between national and local decision making.

Curriculum Design Principles

The curriculum should be:

authentic: rooted in Welsh values and culture and aligned with an agreed set of stated purposes

evidence-based: drawing on the best of existing practice within Wales and from elsewhere and on sound research

responsive: relevant to the needs of today (individual, local and national) but also equipping all young people with the knowledge, skills and dispositions for future challenges as lifelong learners

inclusive: easily understood by all, encompassing an entitlement to high quality education for every child and young person and taking account of their views in the context of the United Nations Convention on the Rights of the Child (UNCRC) and those of parents, carers and wider society

ambitious: embodying high expectations and setting no artificial limits on achievement and challenge for each individual child and young person

Curriculum Design Principles

The curriculum should be:

empowering: developing competencies which will allow young people to engage confidently with the challenges of their future lives

unified : enabling continuity and flow with components which combine and build progressively

engaging: encouraging enjoyment from learning and satisfaction in mastering challenging subject matter

based on subsidiarity: commanding the confidence of all, while encouraging appropriate ownership and decision-making by those closest to the learning and teaching process

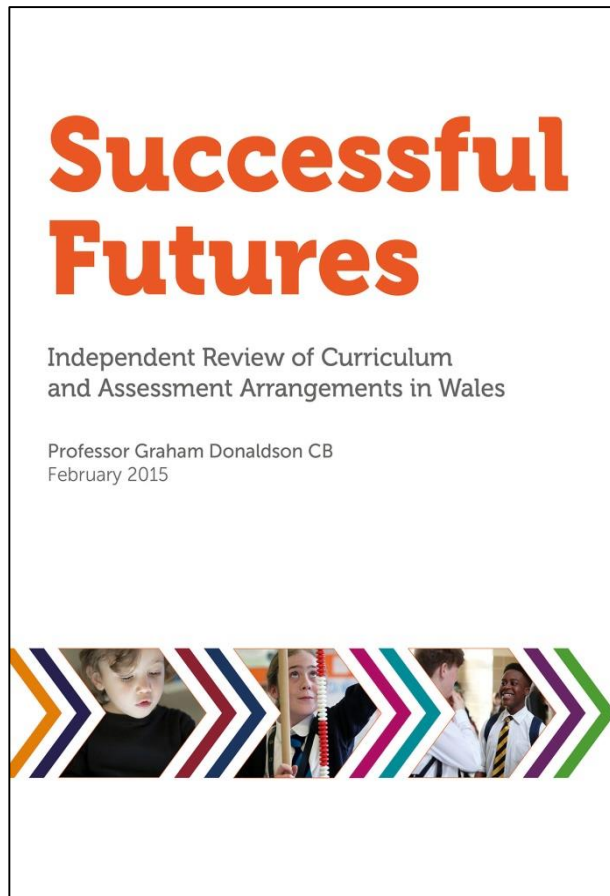
manageable: recognising the implications for and supported by appropriate assessment and accountability arrangements.

Scope of the curriculum

“The school curriculum in Wales should be defined as including all of the learning experiences and assessment activities planned in pursuit of agreed purposes of education.”



The report: Successful Futures



> 8 Chapters

Overview
Processes and Evidence
Purposes
Structure
Pedagogy
Assessment
Implications
Conclusions and Recommendations

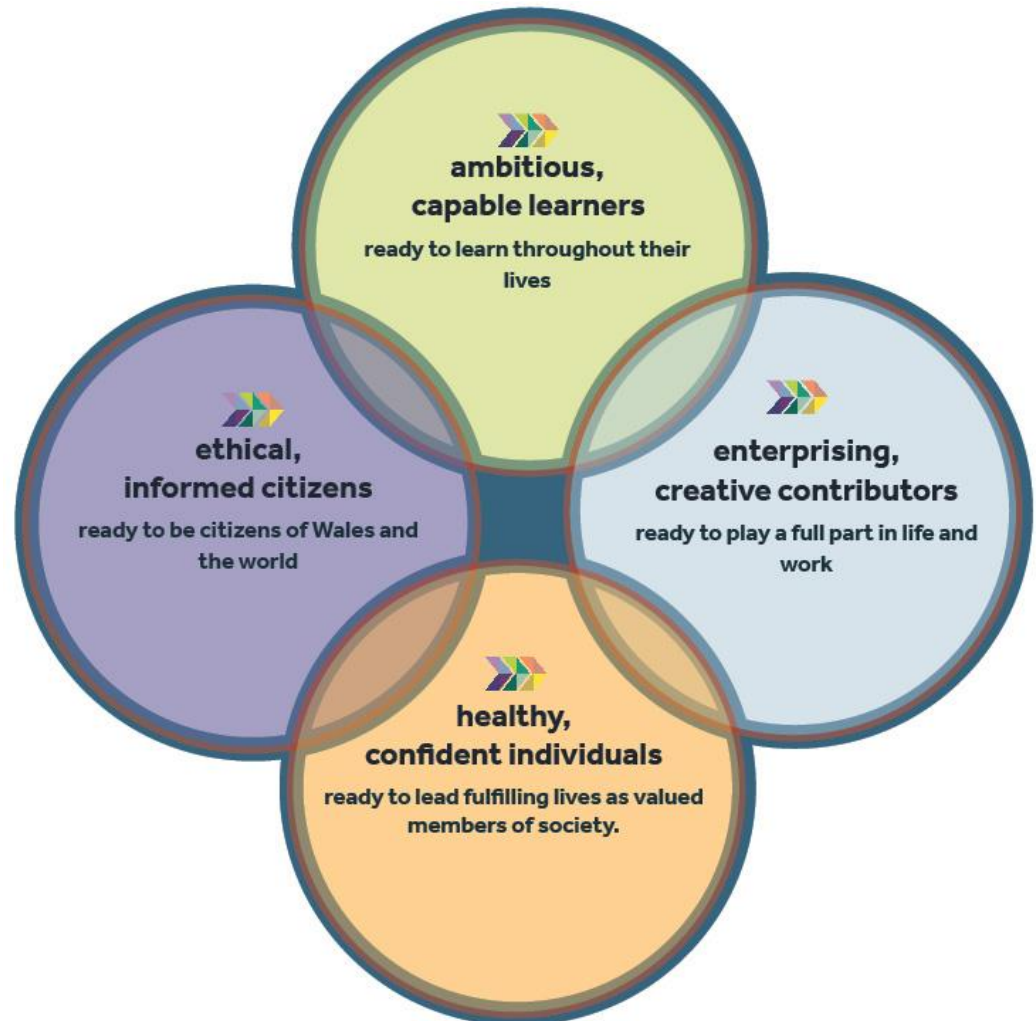
> 68 Recommendations

Purposes of the curriculum

- › Mobilise opinion and support
- › Encourage clarity and transparency
- › Focus on what matters
- › Protect against reductionism

Purposes of the curriculum

The purposes of the curriculum in Wales should be that children and young people develop as:



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

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

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 well
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.

The structure of the curriculum should:

- reflect directly and promote the **curriculum purposes**
- embody the **entitlement** of all children and young people, including those with severe, profound or multiple learning difficulties, to a high-quality, broad and appropriately balanced education throughout the period of statutory education
- promote **progression** in children and young people's learning
- encourage **depth** of learning and provide appropriate **challenge** in ways that will raise overall **standards of achievement**
- promote **coherence** and encourage children and young people to make **connections** across different aspects of their learning

The structure of the curriculum should:

- enable children and young people to **apply in unfamiliar contexts** what they have learned
- promote sustained attention to the development and application of knowledge and skills in **literacy, numeracy and digital competence**
- ensure appropriate emphasis on the **Welsh language and culture**
- encourage **stimulating and engaging** teaching and learning
- be as **simple and straightforward** as possible
- be understood by and have the **confidence** of parents, carers and teachers.

Organising learning

“A curriculum defined largely in terms of discrete subjects can become directly translated into a timetable within which important cross-curricular learning can be marginalised. In addition, separate subject planning, combined with a narrow interpretation of how best to develop literacy and numeracy skills, was sometimes inadvertently resulting in a narrow and repetitive set of experiences.”



Areas of Learning and Experience

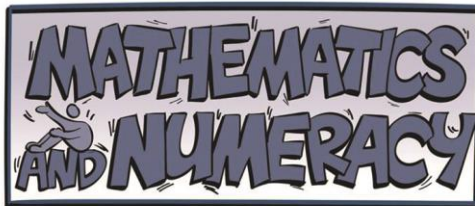


make distinct and strong contributions to developing the four purposes of the curriculum.



Should be internally coherent

employ distinctive ways of thinking



have an identifiable core of disciplinary and instrumental knowledge.



Taken together, they should define the breadth of the curriculum.

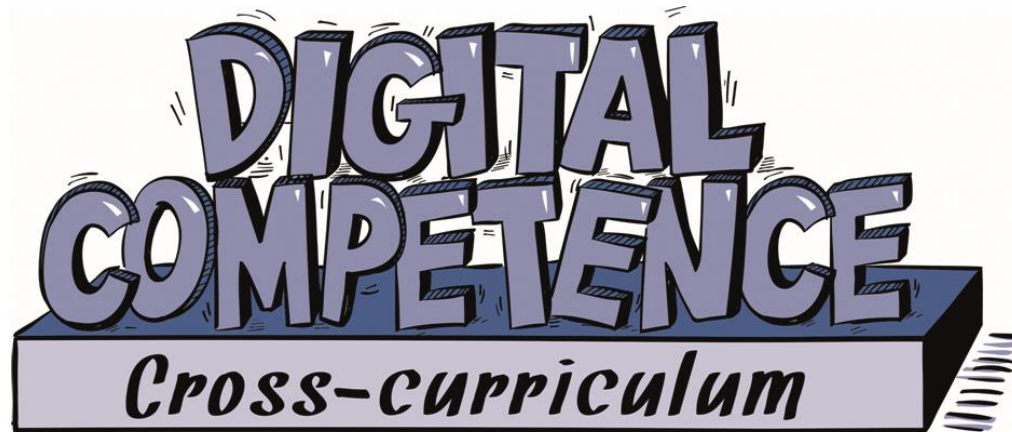
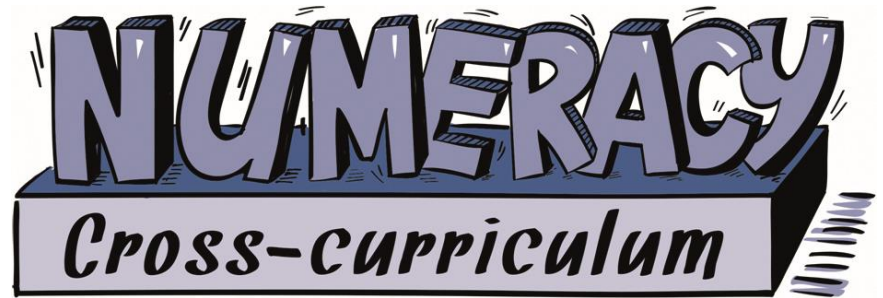
Cross-curriculum Responsibilities

“Children and young people should have their learning developed across the curriculum through three Cross-curriculum Responsibilities that should be the responsibility of all teachers: literacy; numeracy; and digital competence.”

“A digital competence framework and an accompanying ‘Routes to Learning Digital Competence’ should be developed and be included as a Cross-curriculum Responsibility.”



Cross-curriculum responsibilities



Characteristics of progression include

- a capacity to engage with ideas and issues in greater depth
- success in tackling more complex problems and being able to grasp more abstract concepts
- becoming more accomplished in performance
- building a solid foundation of basic grammar and spelling and gaining a secure grasp of number bonds.

Progression

- A continuum of learning from 3 to 16, without phases and key stages.
- Progression Steps at five points in the learning continuum.
- Achievement outcomes for each Progression Step contributing to each purpose.



Achievement Outcome recommendations

- developed for each Progression Step in each Area of Learning and Experience,
- contribute clearly to the four curriculum purposes and should have an emphasis on achievement in a broad sense, rather than only narrower measures of attainment. They should include references to relevant experiences.
- described from the learner's point of view, using terms like 'I have...' for experiences and 'I can...' for outcomes.
- All children and young people should make progress along the same continuum,

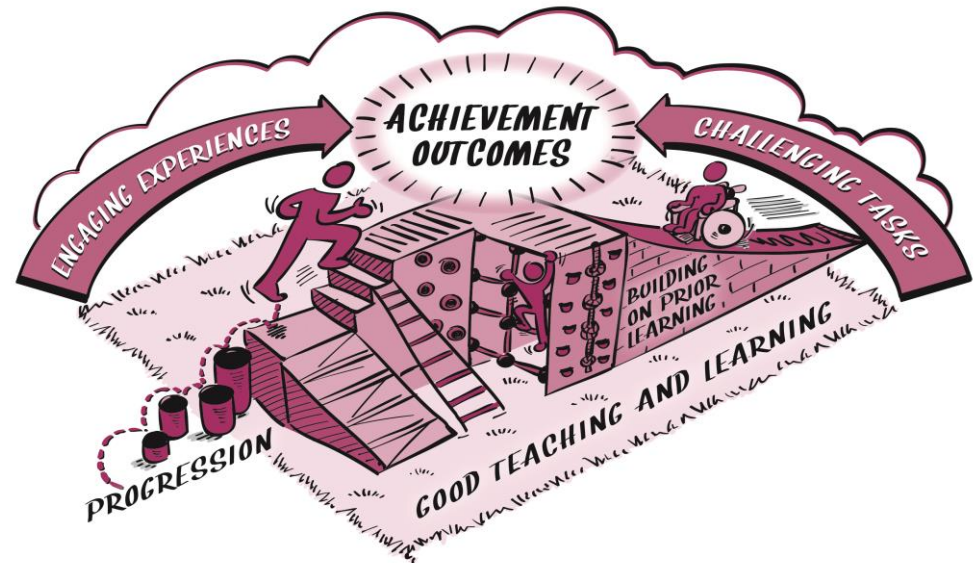
Welsh language

Key recommendations include the following.

- Welsh to be statutory to age 16.
- A focus on communicating in real-life situations.
- Welsh-medium schools to act as hubs to support the language in English-medium schools.
- Qualifications at age 16 to focus on speaking, listening and application in the workplace.

Pedagogy

“The Review’s ambitions can only be translated into reality for children and young people through teachers’ and other education practitioners’ professional skill and judgement in selecting appropriate teaching methods.”



Assessment

The following are recommended in relation to assessment.

- Simplification of assessment procedures.
- Stronger role for assessment to support learning.

Assessment arrangements should:

- align assessment with the purposes of learning: assess what matters
- be clear about the reasons for assessment and plan in advance for the intended uses of assessment results
- promote the use of a wide range of techniques that are appropriate to their purpose
- engage students in their own assessment
- ensure that reports to parents and carers focus on progress
- be as light-touch as possible and avoid unnecessary bureaucracy
- use assessment evidence systematically and in combination with other evidence to inform school self-evaluation
- address the implications of good assessment practice for teacher capacity
- form a coherent, agreed assessment and evaluation framework with a clear vision and strategy based on all of the above.

What it might look like

- A new way of thinking.
- Greater scope to plan and provide a curriculum that builds progressively from ages 3 to 16.
- Fresh opportunities to provide interesting and challenging learning experiences.
- Provide a deeper, more satisfying and relevant educational experience.

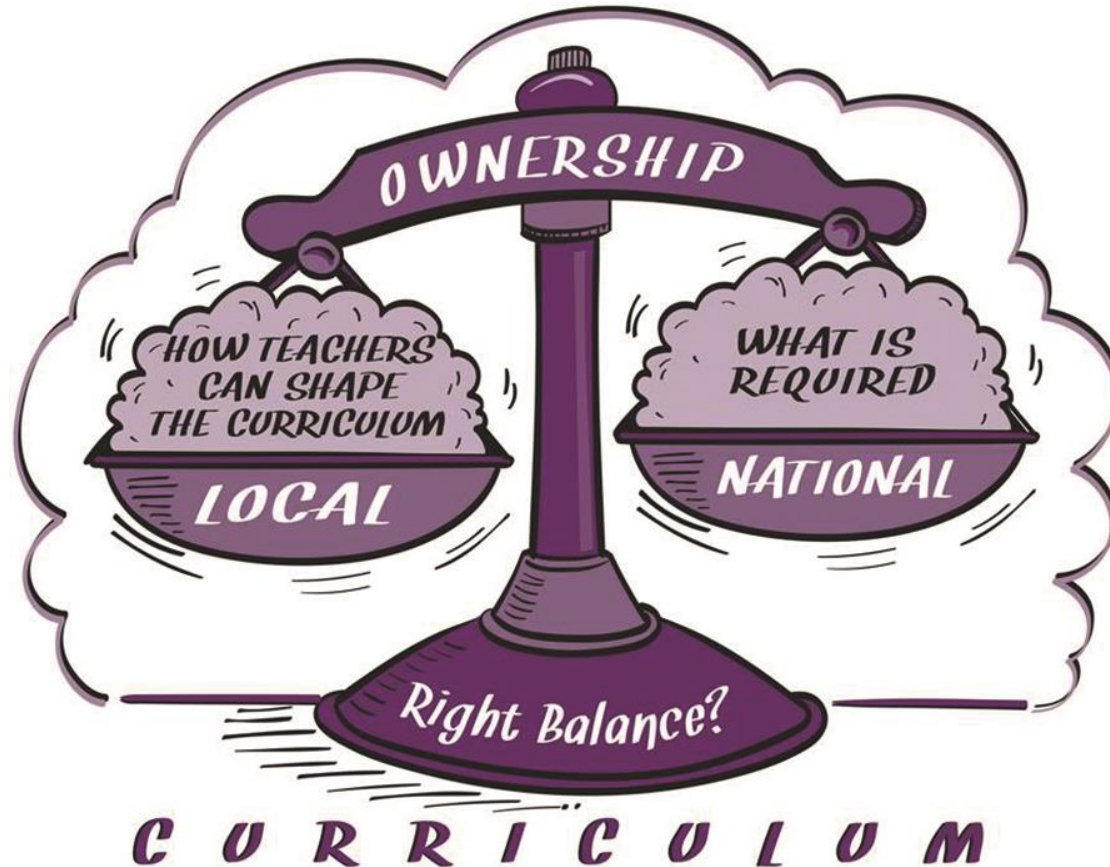
Making it happen

- There is **no single, best approach** to effective educational reform. Research evidence paints a fairly unpromising picture of experiences of educational reform in different settings.
- **Change strategies are highly culture and context specific** and there is a danger that a highly complex matter like the reform of education becomes reduced to oversimplified solutions that do not take sufficient account of the nature and complexity of education. What works in one country may well be inappropriate when applied elsewhere.
- The implementation of the Review's recommendations needs to **learn the lessons** from the limitations of past reform and adopt a change strategy that best meets the nature of the Welsh context and its educational culture.

Principles for implementation

- Evidence led and based on subsidiarity.
- Ambitious and inclusive.
- Manageable, with pace, passion and professionalism.
- Unified.

Subsidiarity in schools and other settings



Making it happen

Leadership Challenge

*Developing a vision and a strategy to
engage with a very uncertain future
AND
securing action to make this happen*



So What?

“Taken together, the Review recommendations aim to provide curriculum and assessment arrangements that will meet the needs and aspirations of all those with an interest in Welsh education. For teachers and school leaders they will provide a more straightforward and coherent basis for the exercise of their professional skills. For children and young people they aim to create a more stimulating and challenging educational experience that will help them to thrive and succeed in an increasingly demanding but exciting world. For employers it will help to provide well-educated employees with both the ‘hard’ and ‘soft’ skills that are integral to the modern workplace. Parents and carers can engage more directly in their children’s learning, receiving clear information about how they are progressing in relation to easily understood curriculum purposes.”



*“**Finally**, the proposals will require **excellent and committed leadership** at all levels in the education system. The Welsh Government has signalled its commitment to establishing the kind of collaborative culture that characterises education systems that aspire to excellence. The recommendations of this Review are intended to support that commitment and to shape a **successful and exciting future for the young people of Wales.**”*





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Dr David Hyerle



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Growing thinking students in thinking schools

Around the world and in Wales





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Thinking Schools International is
An expanding group of educators
from around the world focused on
developing, implementing,
documenting, and openly, sharing
the practices of explicitly
improving all students', teachers',
and administrators' thinking
abilities.



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The significant problems we face today cannot be solved at the same level of thinking we were at when we created them.

Think Different.



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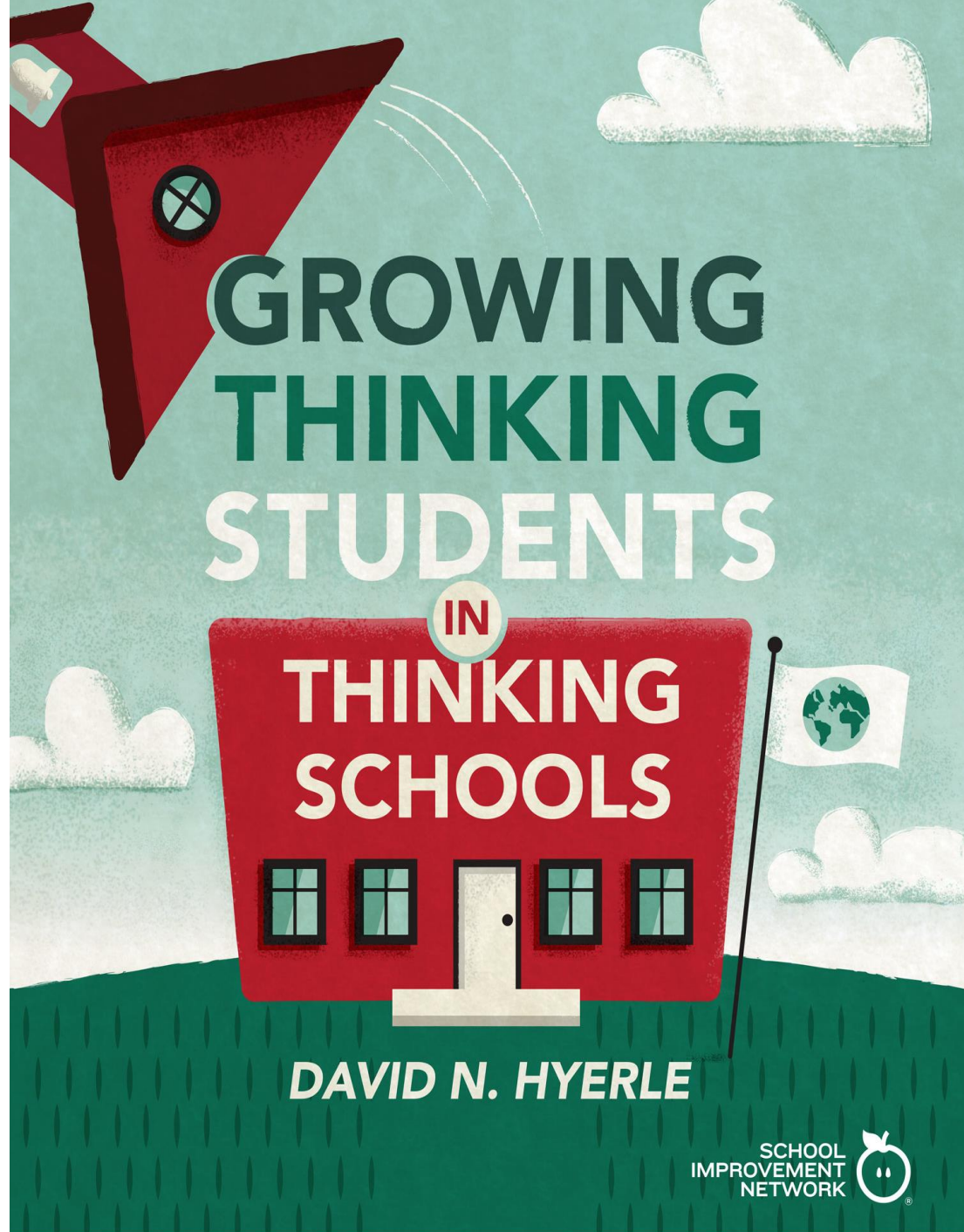
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Think Different.

for the significant problems our
students face today ...



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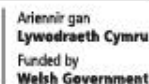


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AN ORGANIC BONELESS SKINLESS CHICKEN THIGHS

Nutrition Facts

Every 1000 g contains (H/L):
Energy 14.0 gpm. Fat
10.0 gpm. (not included)
Calculation: 10.0 gpm. Fat not included

Mean 4-Pyr (%)	100.0	100.0
Std 4-Pyr (%)	11.7	
Std 4-Pyr (g)	10.0	
Observed 4-Pyr	100.0	
Observed 4-Pyr (%)	100.0	
Observed 4-Pyr (g)	10.0	
Observed 4-Pyr (%)	100.0	
Observed 4-Pyr (g)	10.0	



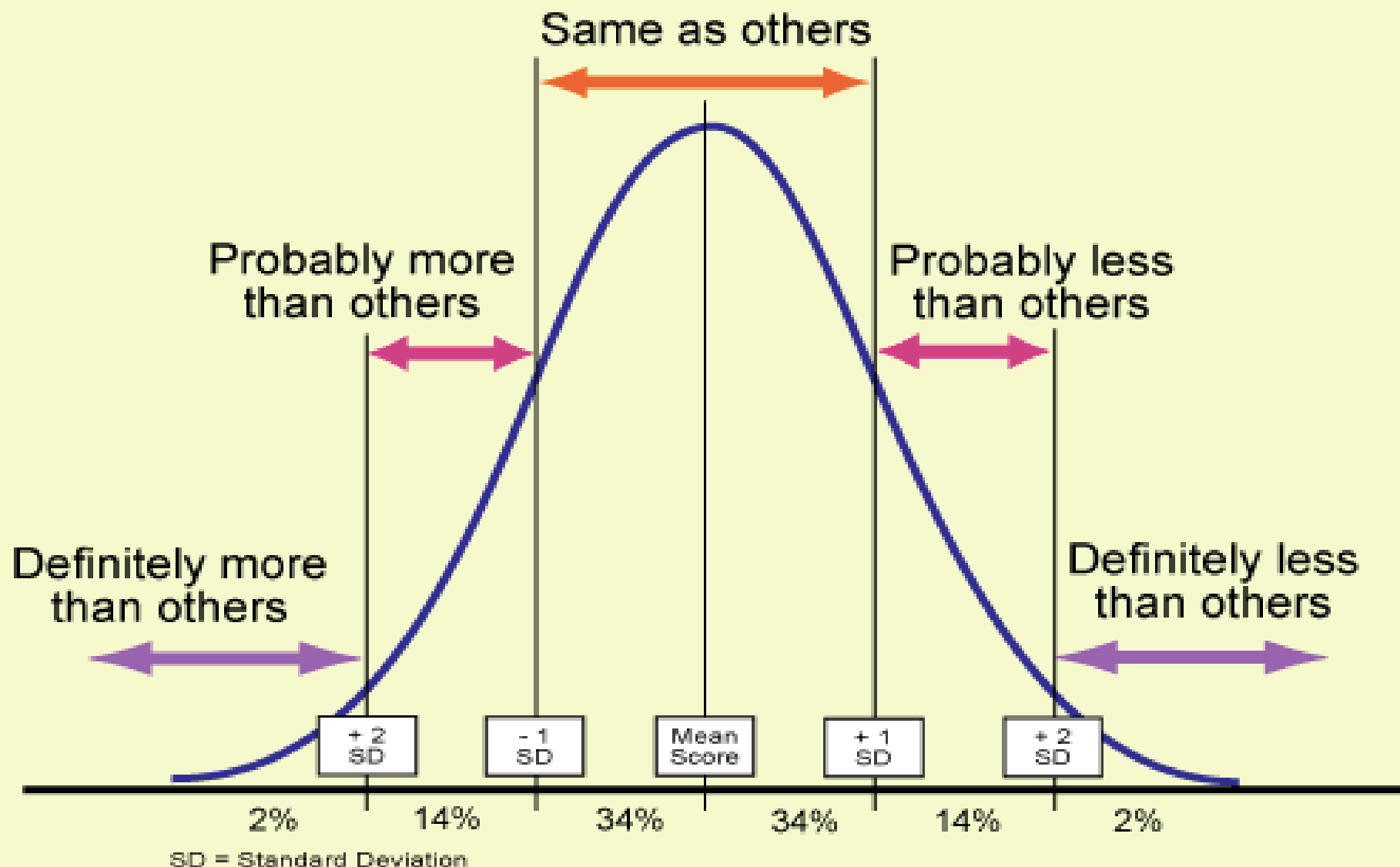


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Visit 5: August 29, 1929
Temperature: 99.1

He picks up the block from the
table, and holds it with thumb
opposition.

He sits momentarily without support
Begins to play with paper.

Smiles at himself in the mirror
and reaches with his hand.

Pushes himself up strongly, resting
on his head and feet, with
his back arched up.





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Robert A. Hyerle
August 29, 1929
5 months old

VISIT #5

He picks up block.
Pushes himself up strongly
and rests on his hands.
Begins to play with paper.
He smiles at himself in the
mirror.
He reaches persistently for
toys out of reach.

VISIT #6

He picks up block deftly and
directly.



RECORD OF VISITS TO THE INSTITUTE OF CHILD WELFARE

Visit 5: August 29, 1929
Temperature: 99.1

He picks up the block from the table, and holds it with thumb opposition.

He sits momentarily without support
Begins to play with paper.

Smiles at himself in the mirror
and reaches with his hand.

Pushes himself up strongly, resting
on his head and feet, with
his back arched up.



7 Months: October 30, 1929
Temperature: 100.

He reaches persistently for toys just
out of reach.
Picks up the block deftly and directly,
one, in each hand.

Picks up the cup by the handle
Manipulates the ring with sustained
inspection

Is interested in the details of the bell
Plays exploitatively with paper and string.
Reaches with one hand, and rotates wrist.
Looks for fallen toys
Scoops the pellet



Oakland, California 1982 the THINK! program





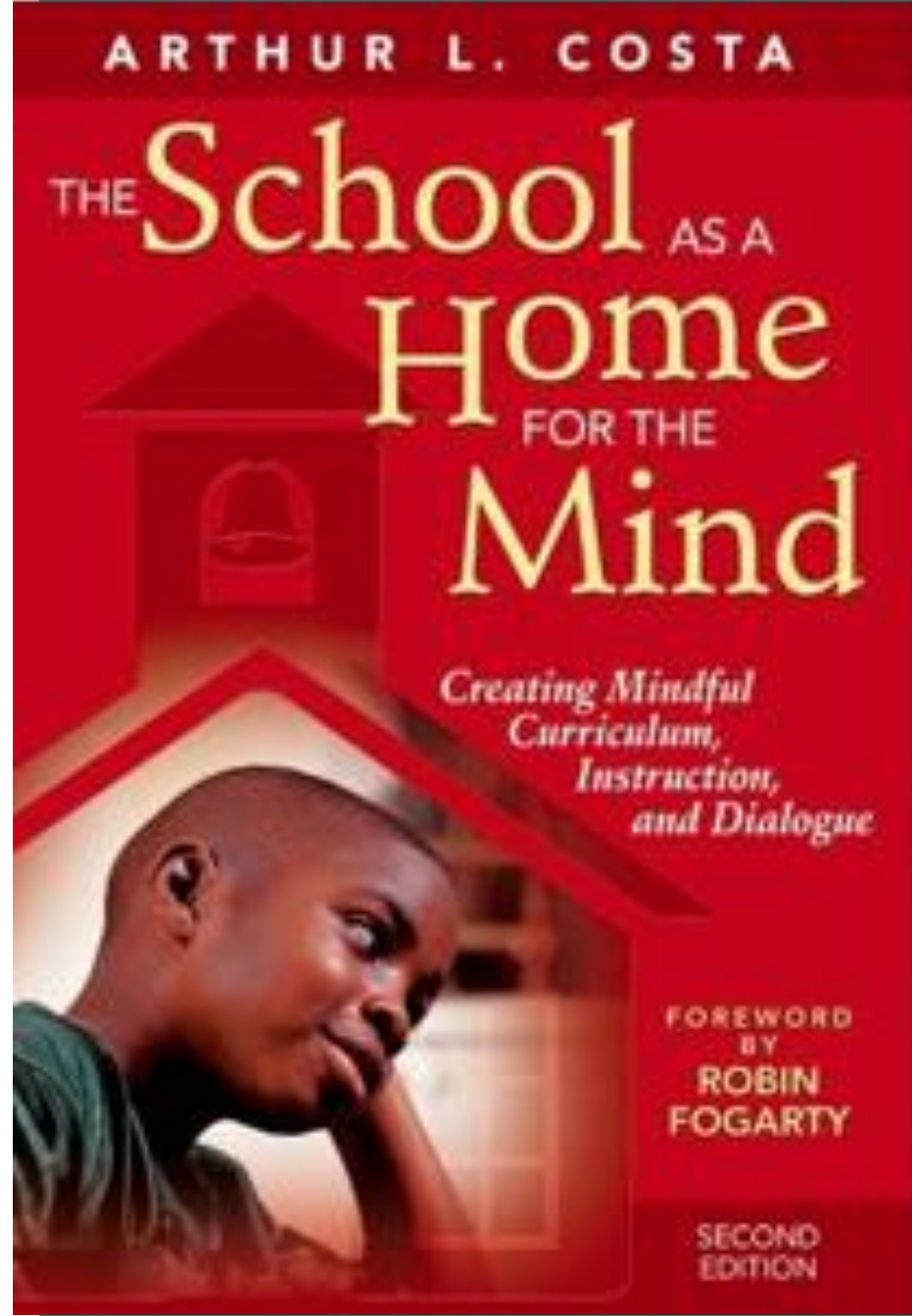
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The Vision

Teaching FOR Thinking

Teaching OF Thinking

Teaching ABOUT Thinking





Dispositions

Enquiry methods

Cognitive processes

Creativity

Learning modalities



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The story is teachers who focus on students'...

1. Cognitive engagement with the content...
2. Developing a way of thinking ... and
3. Emphasizing problem solving and strategies in their teaching about the content they wish students to learn.

John Hattie/Visible Learning



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3 Principles for Growing Thinking Students in Thinking Schools

Principle 1: ALL LEARNERS
All learners have innate abilities to think in a variety of ways.

Principle 2: STUDENT CENTERED MODELS
In order to improve thinking processes AND content learning, students need to become fluent in practical models.

Principle 3: CONTENT AND EXPLICIT THINKING
Creating explicit connections between students' thinking processes and content we teach is critical.



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Principle 2: Student Centered Models



Transferable



Teachable

Fundamental

Integrated



Developmental



Intuitive





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Principle 2: Student Centered Models

Thinking Maps

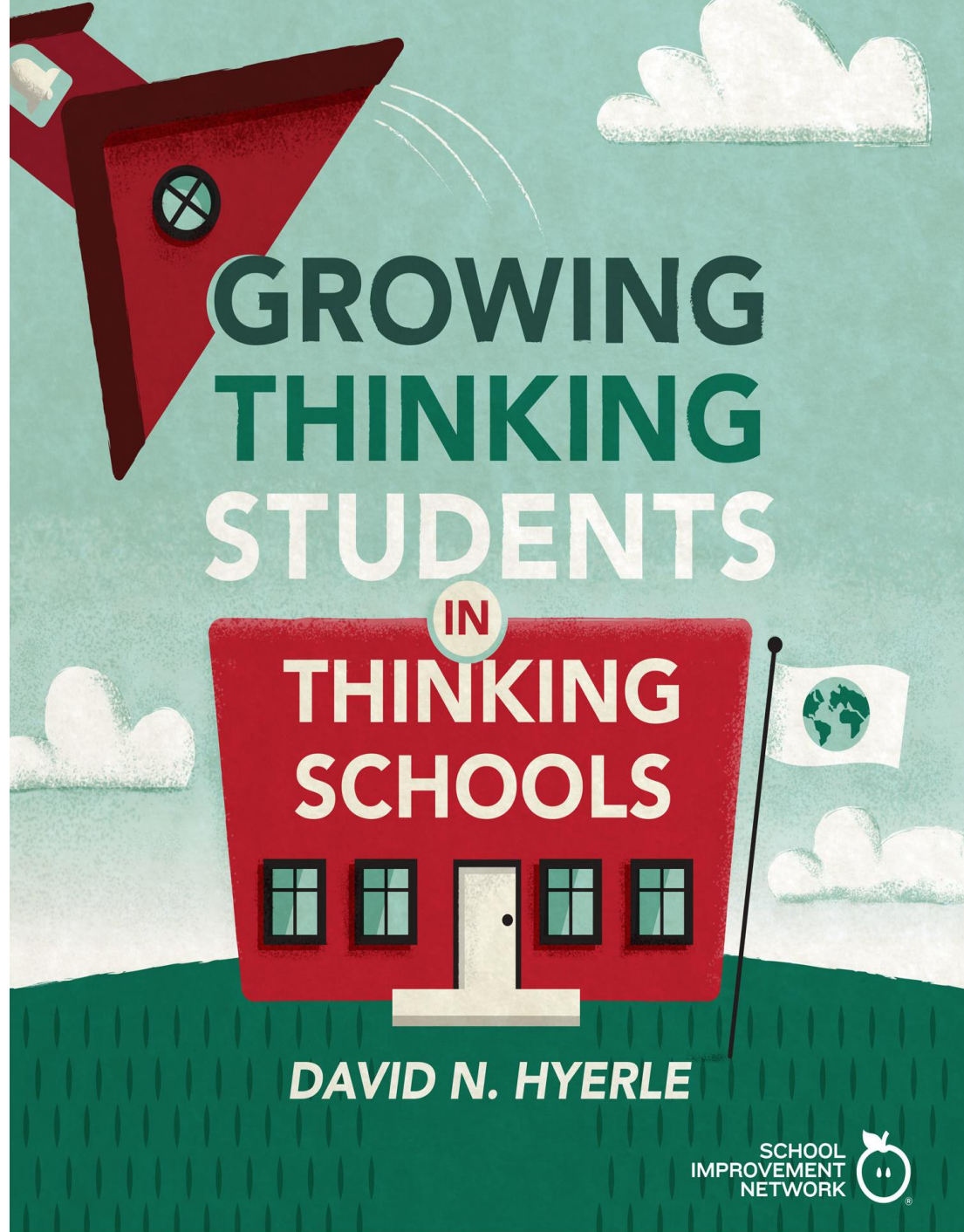
Model: Visual Tools for Thinking

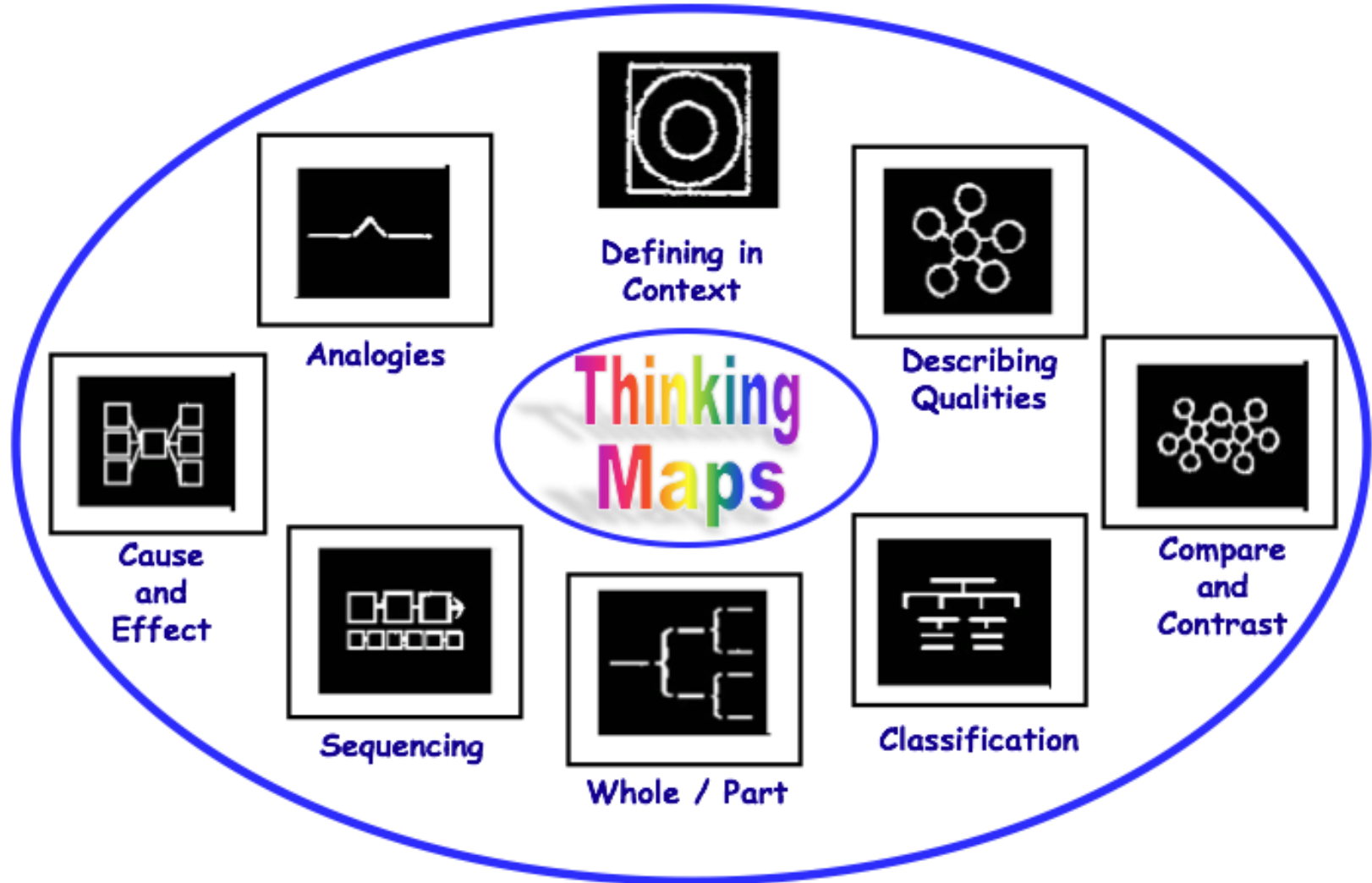
Open Mind

Model: Dispositions for
Mindfulness

Reflective Action

Model: Questioning for Inquiry





Visual Tools



**Used
consistently by
all teachers and
learners**



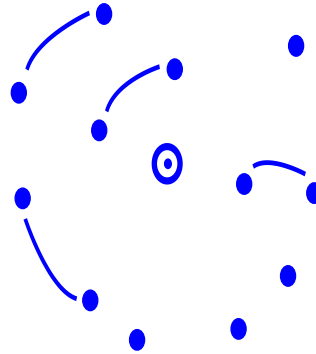
**Based on
fundamental
thought
processes**



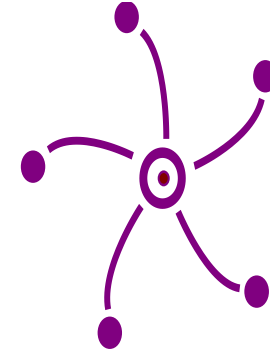
**Used across the
curriculum**



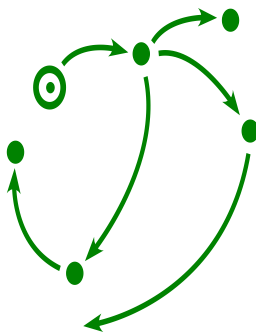
Thinking Points® visual tools for thinking



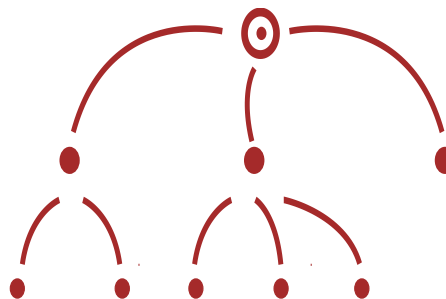
View Points



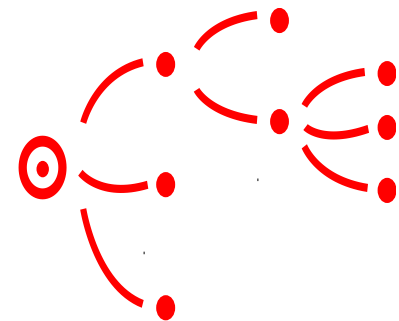
Character Points



Change Points

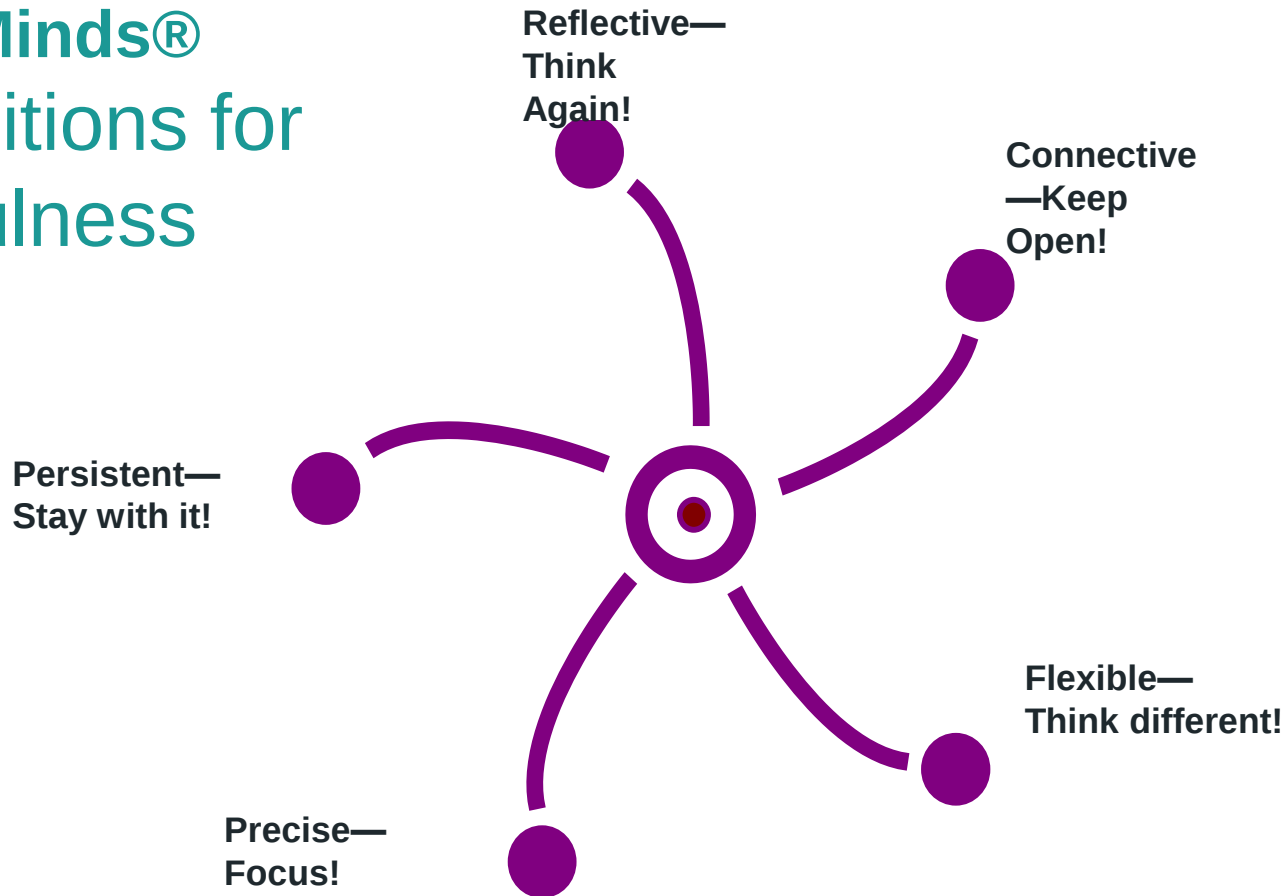


Group Points

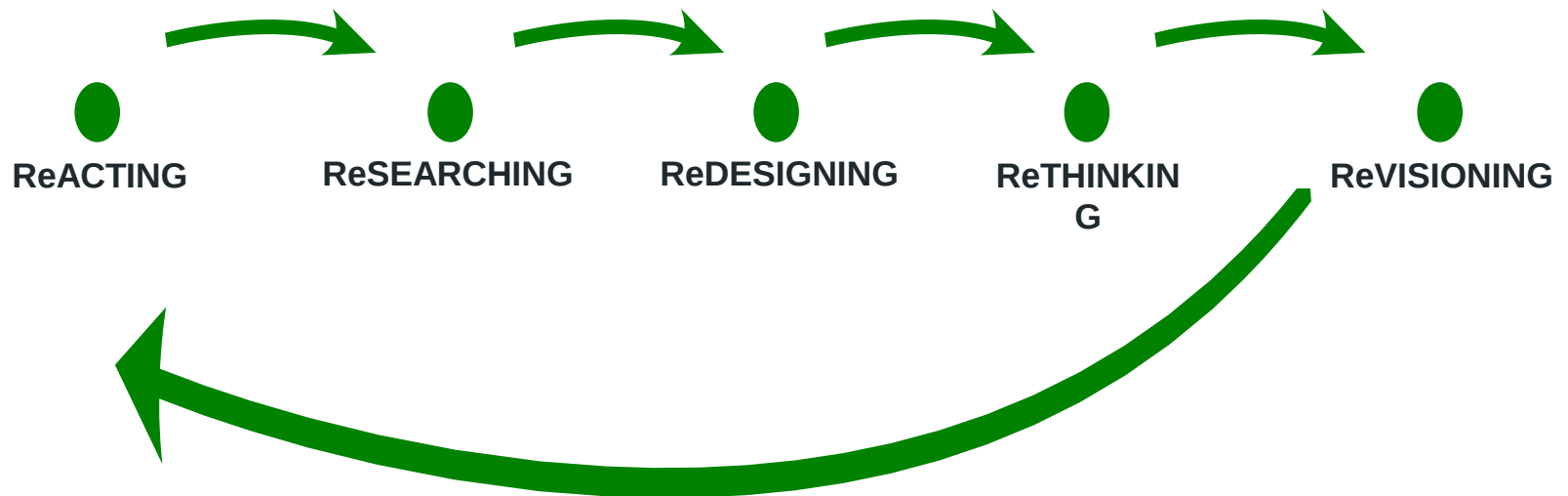


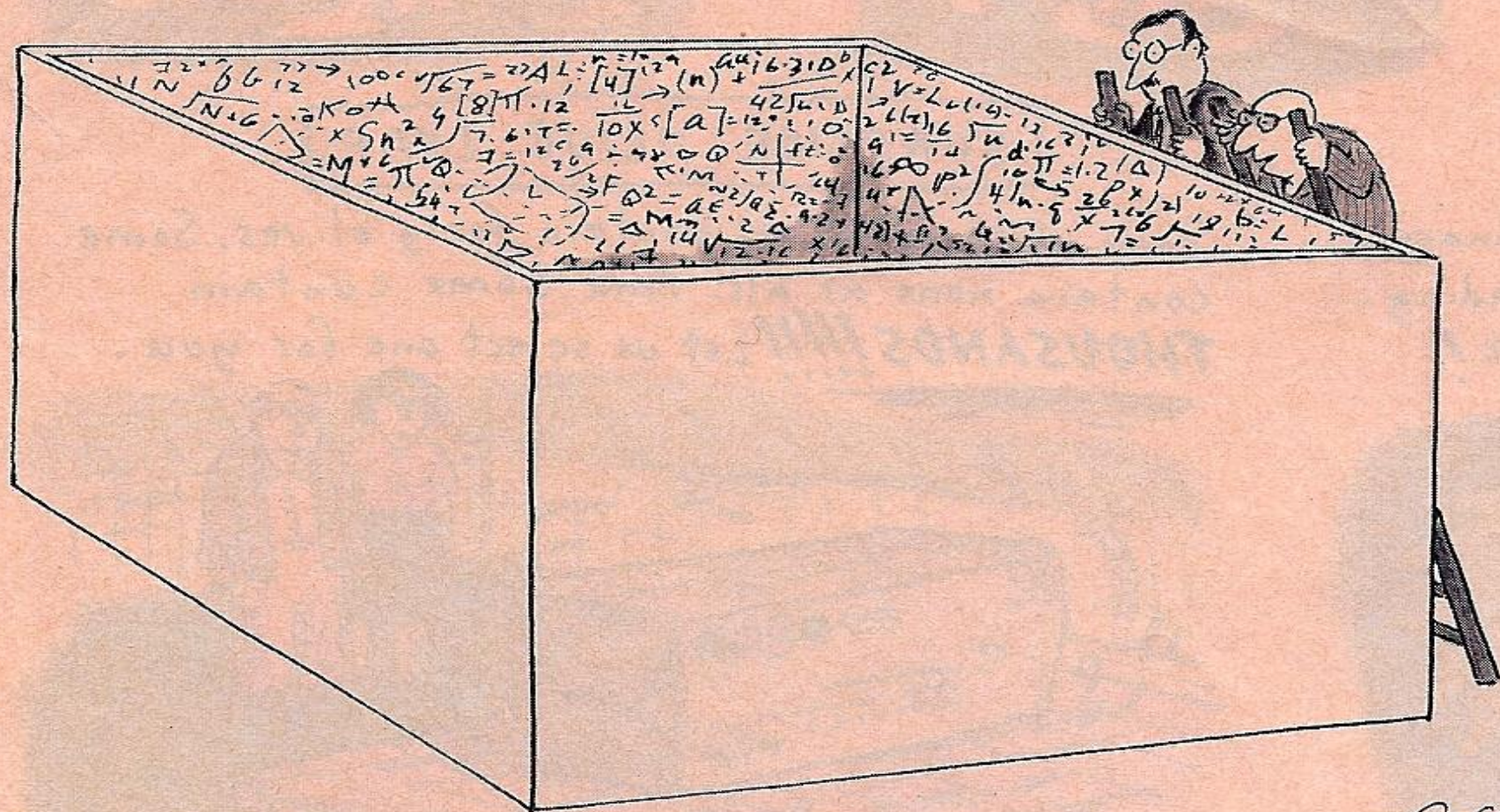
Part Points

Open Minds® dispositions for mindfulness



Reflective Action Process® questioning for inquiry





S. Gross

"Actually, I got some pretty good ideas when I was in the box."



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A Challenge: ORDERS OF CHANGE

1st

Reinforcing and improving

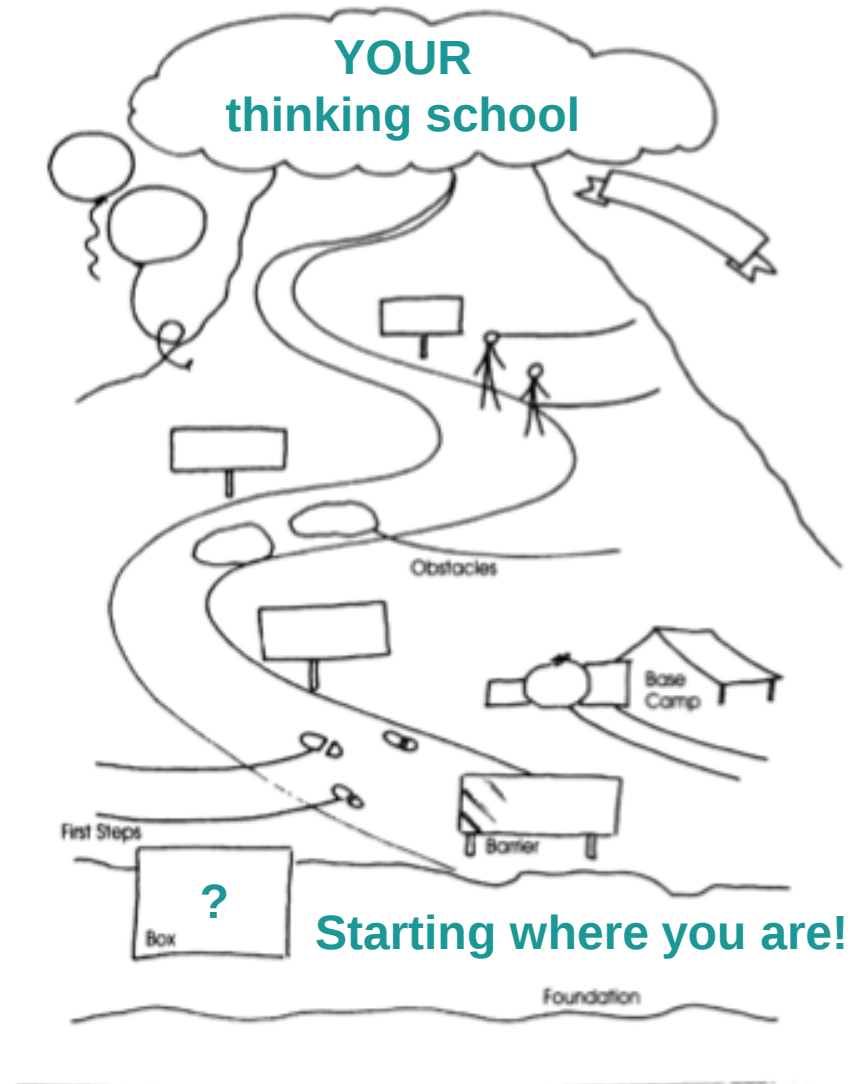
2nd

Consciously changing practices

3rd

Engaging members in
transforming

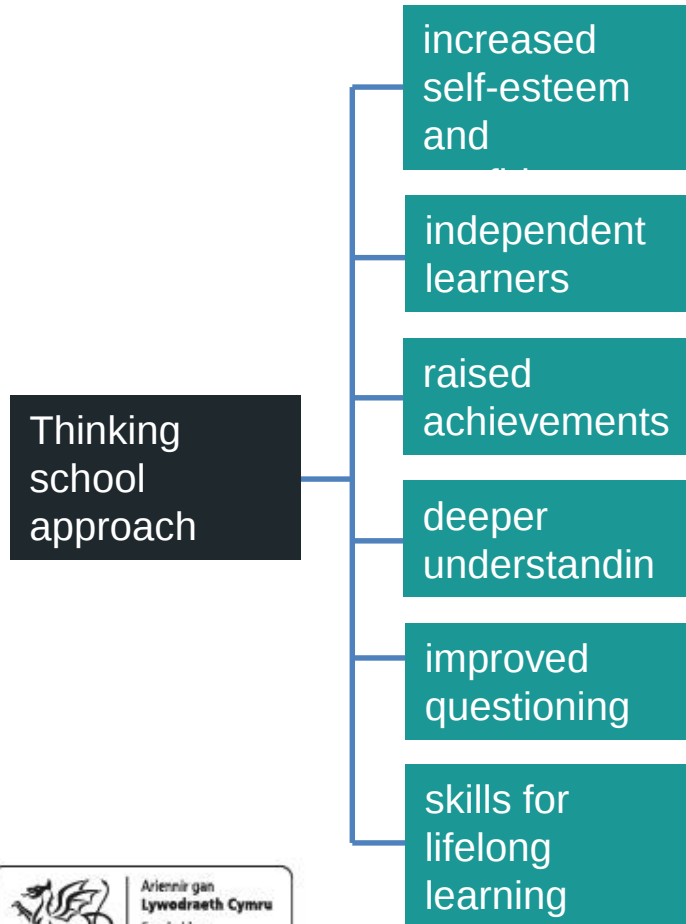






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Outcomes



Achievement scores rose in all but one school ... based on

Exeter University study of 60 Schools Accredited as Thinking Schools

For in depth research and case studies: "Pathways to Thinking Schools"

Sage Publications
2014

Hyerle and Alper editors

I think



Is the office in the
same place as the other?

Can you find them
living in the
same place as the other?

36



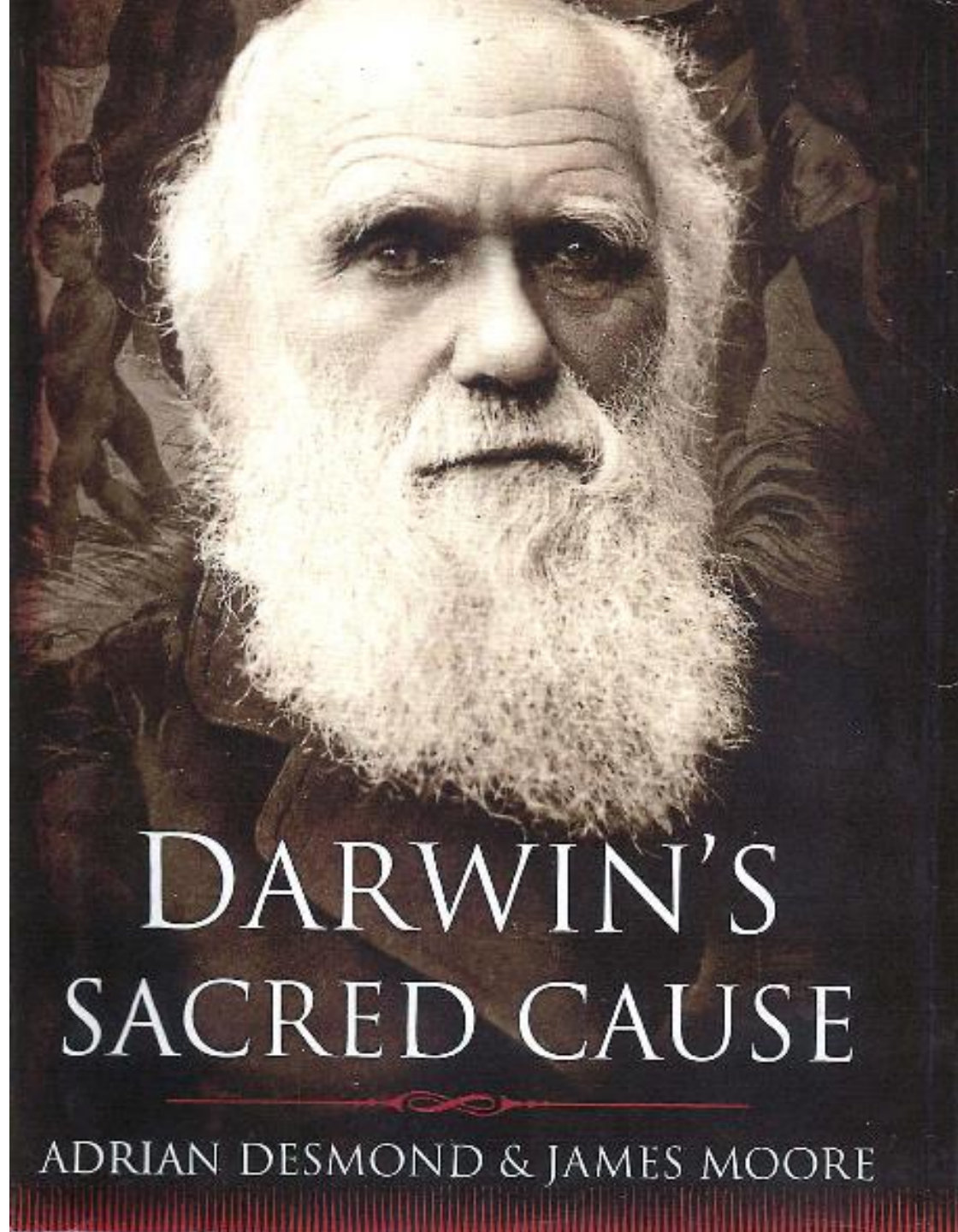
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An evolution in our definition
of human kind and human
intelligence...

from
Darwin
to Dweck...



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iTHINK Malaysia

in collaboration with Thinking Schools International







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Coffee break

The Arena



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GwE 2015 National Conference Towards Excellence

26th March 2015



Tuag at Ragoriaeth
Towards Excellence

Lunch

The Arena



Tuag at Ragoriaeth
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GwE 2015 National Conference Towards Excellence

26th March 2015



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Dr Brett Pugh



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www.cymru.gov.uk

PISA and its importance for Wales

North Wales education Conference

What is PISA?

- PISA assesses the knowledge and skills of pupils aged fifteen on their competence to address real life challenges involving reading, mathematics and science
- This aim differentiates PISA from other pupil assessments which measure their mastery of curriculum subjects
- The main focus for the 2012 round was mathematics, with science and reading as minor domains

Why is PISA important?

X Because it makes us look good in league tables

X Because it is a stick to beat the system with

BUT because it is an indication of how well prepared our young people are for adult life

Can we teach to the PISA test?

- Break with the past: it is not predictable
- Needs in depth skills
- Needs the manipulation of those skills

All the above will take time to implement

We are at a cusp

- Real improvement will take time to embed
- But we must work with urgency

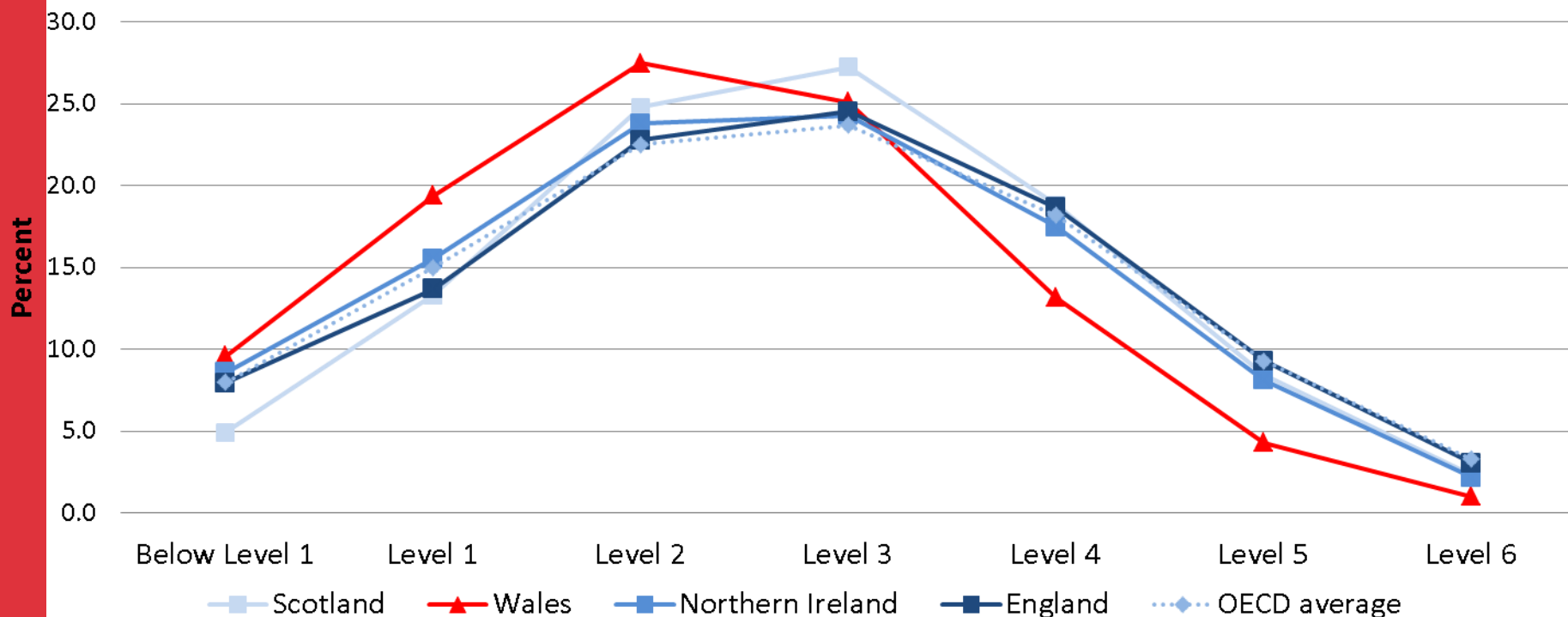
What is the current position?

Wales has significantly dropped in Maths and Science since 2006

Domain	2006	2009	2012	Change from 06	Change from 09
Mathematics	484	472	468	-16	-4
Science	505	496	491	-14	-5
Reading	481	476	480	-1	4

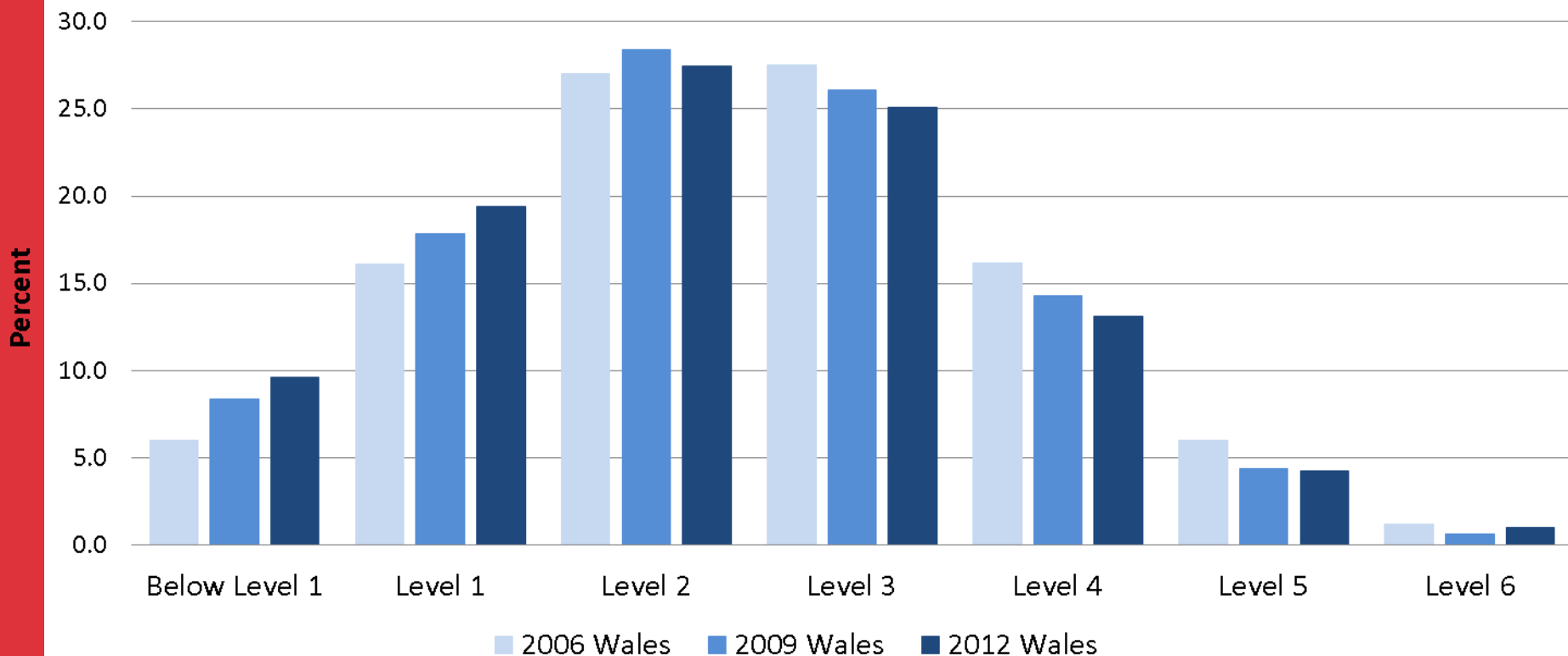
Mathematics

Percentage of students at each proficiency level on the maths scale PISA 2012



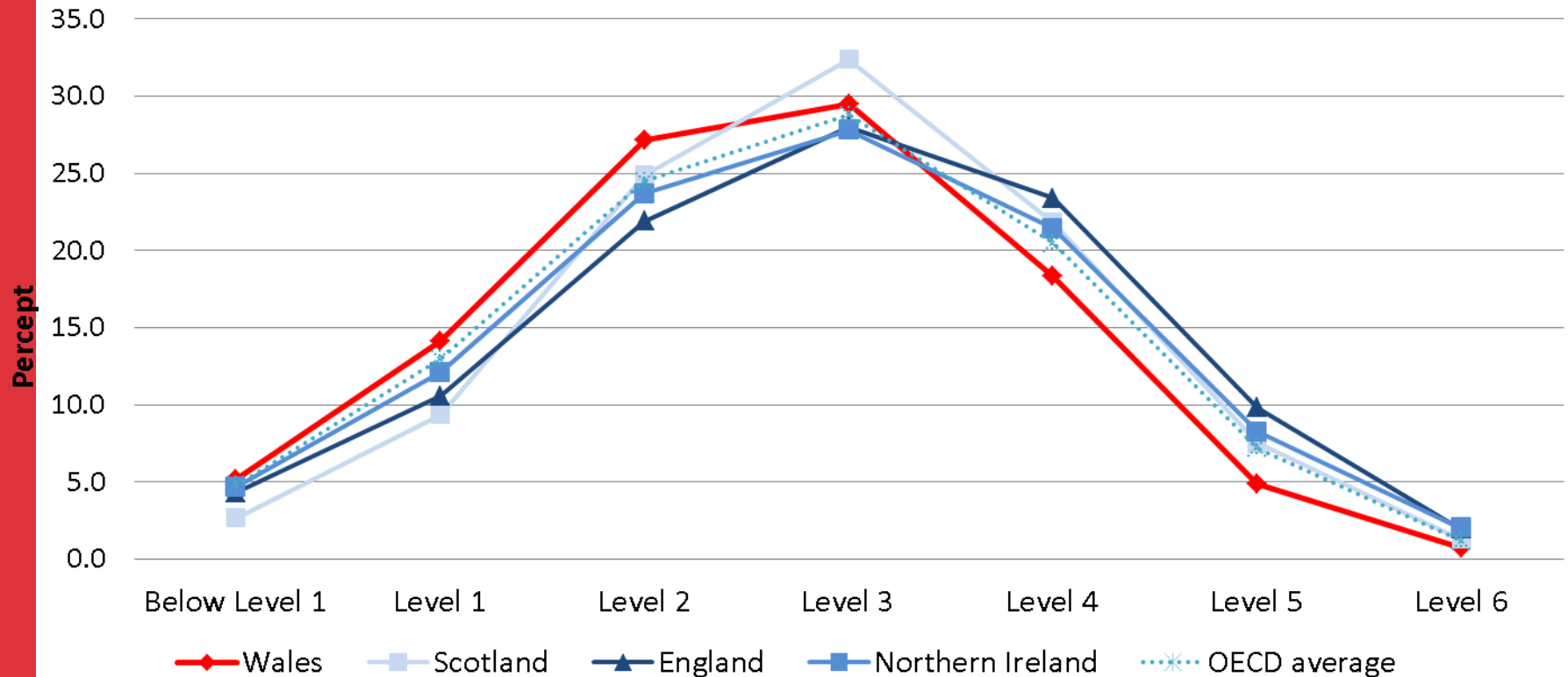
Mathematics

Percentage of students at each proficiency level on the maths scale PISA 2006, 2009, 2012



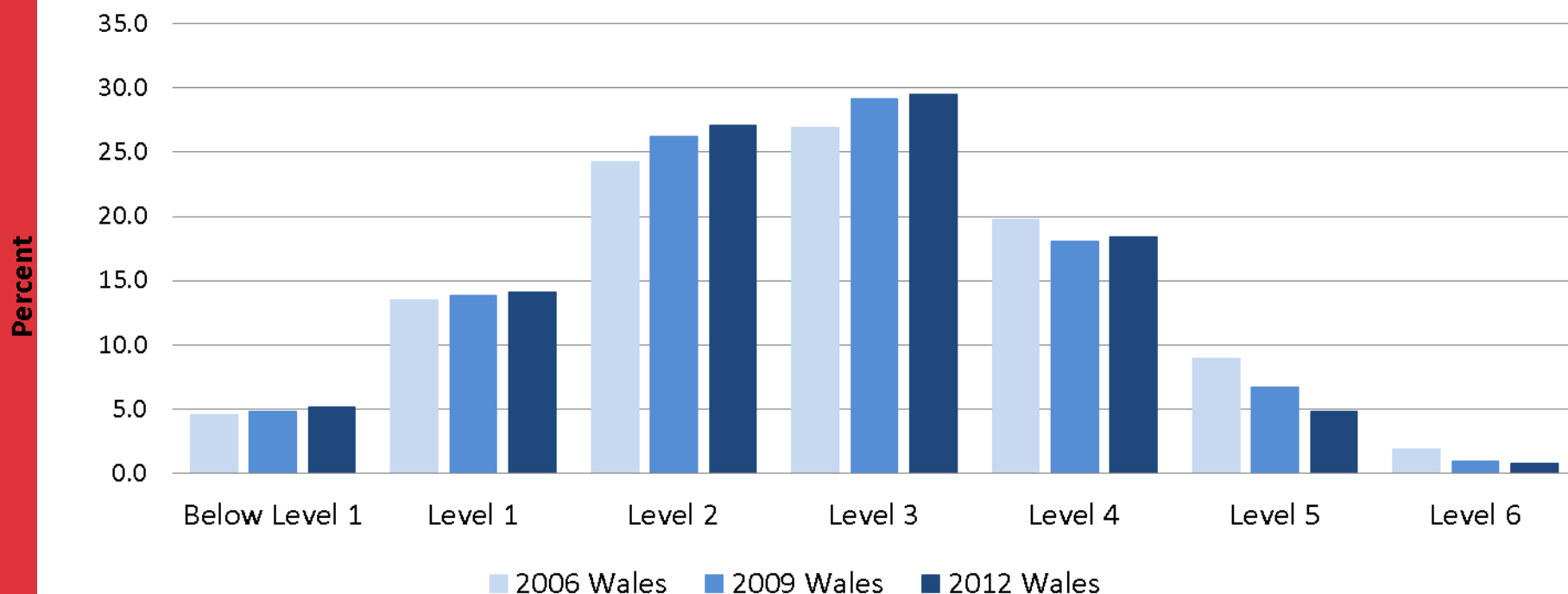
Science

Percentage of students at each proficiency level on the science scale PISA 2012



Science

Percentage of students at each proficiency level on the science scale PISA 2006, 2009, 2012



Qualified for Life, our strategic plan

The Vision

Learners in Wales will enjoy teaching and learning that inspires them, in an education community that works co-operatively and aspires to greatness, valuing the achievements of every child and young person

Our Approach

- Our Aim – excellence in teaching and learning
- Our Objectives:
 - An excellent professional workforce with strong pedagogy based on an understanding of what works
 - A curriculum which is engaging and attractive to young people and which develops within them the ability to independently apply knowledge and skills
 - Qualifications that are nationally and internationally recognised and act as a credible passport to future learning and employment
 - Leaders of education working together providing mutual support and challenge to raise standards in all schools

Strategic objective 2:

A curriculum which is engaging and attractive to young people and which develops within them the ability to independently apply knowledge and skills

- Consider the recommendations of Professor Graham Donaldson's independent review in taking forward a New Curriculum for Wales

Donaldson Review

Four big purposes of the curriculum:

- All our children will be:
 - ambitious learners
 - enterprising and creative
 - ethical and informed
 - healthy and confident

Donaldson Review

Key building Blocks

- 3-16
- six Areas of Learning and Experience
- three cross-cutting skills
- assessment linked to progression FOR learning
- broad competencies

Strategic objective 3:
**Qualifications that are nationally and internationally
recognised and act as a credible passport to future
learning and employment**

- Introduce new Wales only GCSEs in English and Welsh Language, mathematics-numeracy and mathematics for first teaching from September 2015
- Support for PISA

Strategic objective 1 and 4: The Furlong Review and the New Deal

- Describe how '*Qualified for Life*' will impact on the workforce and change expectations for pedagogy, leadership and the development of practice from initial teacher training onwards
- Set a timetable for change to enable schools and practitioners to identify priorities

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Thank you



Tuag at Ragoriaeth
Towards Excellence

Questions and Answers



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Thank you

Safe journey home



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