



TransformED

Northern Ireland Curriculum 2028 Short Guides for Schools

Guide 5: What is a knowledge-rich curriculum?





Purpose of this guide

One of the most significant features of the proposed Northern Ireland Curriculum is its commitment to a knowledge-rich approach. This guide explains what a knowledge-rich curriculum is, why it has become a central principle of curriculum reform and what it may mean for schools in practice.

Why is knowledge so important?

The Strategic Review concluded that one of the fundamental weaknesses of the current curriculum is the lack of clarity about what pupils should learn and when they should learn it. This has often resulted in schools having to make curriculum decisions that might be more appropriately determined at system level. As a consequence, pupils can experience different curriculum entitlements depending on the school they attend.

The review highlighted growing international evidence from cognitive science and curriculum research showing that knowledge plays a central role in learning. Pupils are not able to think critically, solve problems, communicate effectively or apply their learning unless they possess secure knowledge that they can draw upon.

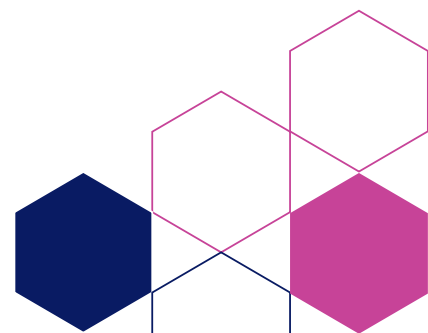
This represents an important shift in emphasis. Rather than seeing knowledge and skills as separate or competing priorities, the proposed curriculum views knowledge as the foundation upon which skills, understanding and capabilities are developed.

What does “Knowledge-Rich” mean?

A knowledge-rich curriculum is one that clearly identifies the knowledge, concepts and vocabulary that pupils should learn and ensures that this learning is carefully sequenced across the curriculum.

In practice, this means that:

- important knowledge is specified rather than left to chance;
- learning builds progressively over time;
- knowledge is revisited and strengthened;
- pupils develop increasingly sophisticated understanding; and
- teachers have greater clarity about curriculum priorities.



Knowledge-rich curriculum design recognises that learning is cumulative. New learning is most effective when it can connect to knowledge already stored in long-term memory. Therefore, curriculum content must be carefully sequenced so that pupils have the foundations needed to understand more complex ideas later.

Knowledge and how children learn

A key influence on curriculum reform has been developments in cognitive science.

Research suggests that learning depends on the gradual accumulation of knowledge in long-term memory. As pupils acquire and connect knowledge, they develop mental models, often referred to as schema, which help them make sense of new information and recognise patterns more efficiently.

When background knowledge is secure, pupils are better able to:

- understand what they read;
- engage in discussion;
- analyse information;
- solve problems; and
- transfer learning to new contexts.

Without these foundations, learning is much more difficult because pupils must focus their attention on understanding basic information rather than engaging in deeper thinking.

Knowledge and equity

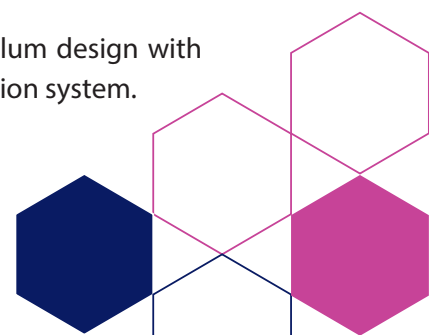
One of the strongest arguments for a knowledge-rich curriculum is its potential contribution to educational equity.

Children do not all begin school with the same experiences, vocabulary, background knowledge or access to cultural opportunities. Some pupils arrive at school having had extensive exposure to books, discussions and experiences that support learning. Others may not.

When curriculum expectations are vague, schools may make very different decisions about what is taught. This can widen inequalities because some pupils gain access to knowledge while others do not.

A knowledge-rich curriculum seeks to address this issue by clearly defining the knowledge that all pupils are entitled to learn. In this way, knowledge becomes a matter of educational entitlement rather than chance.

This is why the reform programme repeatedly links knowledge-rich curriculum design with the wider ambition of securing both excellence and equity across the education system.



What does a knowledge-rich curriculum look like?

A knowledge-rich curriculum is organised around subjects and disciplines because it is through subjects that pupils gain access to specialised forms of knowledge and ways of thinking.

Within subjects, learning is carefully structured so that:

- foundational knowledge is introduced early;
- important concepts are revisited;
- vocabulary is developed systematically;
- understanding grows in depth and complexity; and
- progression is clearly planned.

For example, historical knowledge develops through secure understanding of chronology, significant events, people and concepts. Scientific understanding develops through carefully sequenced knowledge that enables pupils to understand increasingly complex scientific ideas. Mathematical understanding develops through the deliberate sequencing of concepts and procedures that support later learning.

The emphasis is on helping pupils build strong foundations that support future learning rather than encountering isolated topics or disconnected activities.

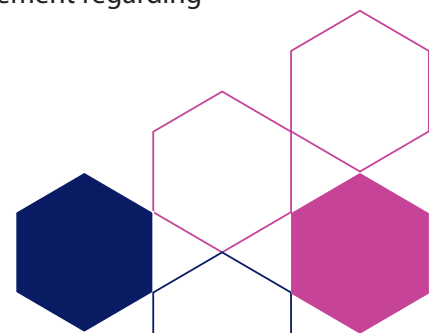
Misconceptions about a knowledge-rich curriculum

There are a number of misconceptions about knowledge-rich curriculum design.

A knowledge-rich curriculum is **not**:

- a collection of disconnected facts;
- rote memorisation without understanding;
- a scripted approach to teaching;
- a reduction in creativity;
- a rejection of skills and capabilities; or
- a disregard for local contexts and school autonomy.

Instead, knowledge-rich curriculum design aims to provide the foundations that make creativity, reasoning, communication and problem-solving possible. The curriculum defines what pupils should learn, but schools continue to exercise professional judgement regarding how that learning is taught and experienced.



The relationship between knowledge and capabilities

The curriculum does not treat capabilities as generic skills that can be taught separately from subject content. Rather, capabilities develop when pupils learn rich curriculum knowledge. This approach seeks to avoid the problems associated with teaching generic skills in isolation from knowledge and content. (Also see: Guide 7: The capabilities)

What might this mean for schools?

For many schools, aspects of a knowledge-rich approach may already be evident within curriculum planning and teaching.

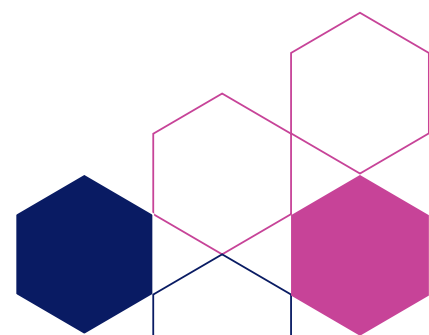
However, schools may increasingly be asked to consider:

- What knowledge is most important and why?
- Is essential vocabulary identified clearly?
- Does learning build systematically over time?
- Does the sequence build on pupils' prior knowledge?
- Are there unnecessary gaps or repetitions?
- How effectively do pupils retain what they learn?
- Is the curriculum planned towards ambitious end goals for the key stage and phase?
- How are capabilities developed through the effective teaching of curriculum content?

The focus is likely to move away from covering large amounts of disconnected content and towards ensuring that pupils develop secure understanding of the most important knowledge within each subject.

Discussion questions for schools

1. How knowledge-rich is our current curriculum?
2. What benefits could this approach bring for learners?
3. What opportunities does a knowledge-rich approach bring for us as teachers?
4. What challenges might we face in implementing this approach?



Key message

A knowledge-rich curriculum ensures that all pupils have access to the knowledge, concepts and vocabulary they need to succeed. By making knowledge explicit, carefully sequenced and available to all learners, the proposed curriculum seeks to strengthen progression, improve equity and provide a stronger foundation for developing capabilities, understanding and lifelong learning.

Recommended reading

- Curriculum 2028: [Overview paper](#)

