The importance of metacognition

Reading skills in the new specifications for GCSE

Ceri Rudman Blackwood Comprehensive School

Read the following text.

Kakapo

Until recently the wildlife of New Zealand consisted of almost nothing but birds. Only birds could reach the place. The ancestors of many of the birds that are now natives originally flew there, but – and this is the point – there were no predators. No dogs, no cats, no ferrets or weasels, nothing that the birds needed to escape from particularly.



And flight, of course, is a means of escape. It's a survival mechanism, and one that the birds of New Zealand found they didn't especially need. Flying is hard work and consumes a lot of energy.

Not only that, there is also a trade off between flying and eating. The more you eat the harder it is to fly. So instead of having a light snack and then flying off, increasingly, the birds would settle in for a larger meal and go and waddle afterwards.

So when eventually European settlers arrived and brought cats and dogs and stoats and possums with them, a lot of these now flightless birds were suddenly waddling for their lives. The kiwis, the takahes – and the old night parrots the kakapos.

Of these, the kakapos is the strangest. It is a bird out of time. If you gaze at its large, round, greeny brown face, it has a look of serenely innocent incomprehension that makes you want to hug it and tell it that everything will be all right, though you know that it probably will not be.



It is an extremely fat bird. Its wings are just about good for waggling a bit if it thinks it's about to trip over something — but flying is completely out of the question. Sadly, however, it seems that not only has the kakapo forgotten how to fly, but it has also forgotten that is has forgotten how to fly. Apparently a seriously worried kakapo will sometimes run up a tree and jump out of it, whereupon it flies like a brick and lands in a graceless heap on the ground.

By and large, though, the kakapo has never learnt to worry. It's never had anything much to worry about.

Most birds, faced with a predator, will at least realise that something's up and bolt for safety, even if it means abandoning any eggs or chicks in its nest – but not the kakapo. It has no conception that anything could possibly want to hurt it, so it tends to sit on its nest in a state of complete confusion and leaves the other animal to make the next move – which is usually a swift and final one.



How advanced is your verbal reasoning?

Put these events in order by numbering them 1 - 6.

- Predators arrived in New Zealand
- Some birds lost their ability to fly
- Birds in New Zealand lived safely without threat
- Flightless birds were at risk
- Birds' dietary and exercise habits changed
- Bird numbers reduced.

And the answer is...

statement	number
Predators arrived in New Zealand	4
Some birds lost their ability to fly	3
Birds in New Zealand lived safely without threat	1
Flightless birds were at risk	5
Birds' dietary and exercise habits changed	2
Bird numbers reduced	6

What reading skills were being tested?

Synthesis – through summarising and sequencing information

In our school, pupils in Year 8 and 9 found this the most difficult question to access, even though Bloom's taxonomy would suggest this should not be that difficult a skill:

- Locating and retrieving information (find and copy)
- Comprehension and synthesis (understanding and processing the information)
- Analysis (inference and deduction)
- Appreciation and evaluation (understanding purpose / type of text etc.)

Making texts accessible or `dumbing down`?

1 tier system for GCSE English Language has implications......

Let's pose a question – if we give pupils reading material which is always comfortably within their reading age, will they improve?

Do we, as good readers, need to understand every word to understand the meaning of the text?

How do we manage?

The case for demanding material.

Read the following:

SOME cultural archetypes leave the stage with a flourish, or at least some foot stomping. All those pith-helmeted colonialists, absinthe-addled poets and hippie gurus founding 1970s utopias: They made some noise, if not always much sense, before being swallowed by history. Yet one modern American type is slipping into the past without a rattle or even its familiar whimper — the neurotic.

For a generation of post-war middle-class Americans, being neurotic meant something more than merely being anxious, and something other than exhibiting the hysteria or other disabling mood problems for which Freud used the term. It meant being interesting (if sometimes exasperating) at a time when psychoanalysis reigned in intellectual circles and Woody Allen* reigned in movie houses.

That it means little now, to most Americans, is evidence of how strongly language drives the perception of mental struggle, both its sources and its remedies. In recent years, psychiatrists have developed a more specialized medical vocabulary to describe anxiety, the core component of neurosis, and as a result the public has gained a greater appreciation of its many dimensions. But in the process we've lost entirely the romance of neurosis, as well as its physical embodiment — a restless, grumbling, needy presence that once functioned in the collective mind as an early warning system, an inner voice that hedged against excessive optimism.

In today's era of exquisite confusion — political, economic and otherwise — the neurotic would be a welcome guest, nervous company for nervous days, always ready to provide doses of that most potent vaccine against gloominess: wisecracking, urbane gloominess

Some of the reasons that "neurotic" has fallen out of colloquial usage are obvious. Freudian analysis lost its hold on the common consciousness, as well as in psychiatry, and some of Freud's language lost its power. And scientists working to define mental disorders began to slice neurosis into ever finer pieces, like panic disorder, social anxiety and obsessive-compulsive disorder — all evocative terms that percolated up into common usage, not to mention into online user groups, rock lyrics and TV shows.

In 1994, the Diagnostic and Statistical Manual, psychiatry's encyclopedia of mental disorders, officially dropped the word neurosis from the book. "The DSM is the lingua franca of psychiatry, and given what we know today the term feels old-fashioned and quaint," said Dr. Michael First, a former editor of the manual. "With the general decline of value of Freud in our society, it is ultimately anachronistic."

Still, the desire for precision and the decline of Freudian thinking do not entirely explain the disappearance of the neurotic. Psychiatrists don't ultimately shape the language we use, after all — we all do — and neurosis has at least as much going for it as other Freudian keepers, like ego and id.

The answer may reside in the one area of social science where the spirit of the neurotic is still alive and well: research psychology. "Neuroticism" is one of the "dimensions" of the so-called five-factor model of personality, the most studied measure in the field (other dimensions include conscientiousness and openness). It is rated using a simple questionnaire, in which people respond to statements like "I get irritated easily," "I worry about things" and "I get stressed out easily." Decades of research suggest that scores on those measures are relatively stable through life, and at least some of the differences in factors among people are rooted in genetic inheritance.

Over all, scores on those kinds of questionnaires have not changed much in adults in the United States since the 1950s. But recent studies have found that, among college students, neuroticism levels have increased by as much as 20 percent over the same period. Are young people today really more anxious and troubled — more neurotic — than their parents were at the same age? Many parents undoubtedly think so (college was a long time ago), and some researchers do, too.

But another way to read those numbers is not as a measure of mental makeup but of cultural change. People of all ages today, and most especially young people, are awash in self-confession, not only in the reality-show of pop culture but in the increasingly public availability of almost every waking thought, through Facebook, Twitter and other social media. If chronic Facebook or Twitter posting is not an exercise in neurosis, then nothing is.

The primary purpose of this passage is to:

- A) define a term that has fallen into disuse
- B) describe the irrevocable disappearance of a trait
- C) expand on a well-known metaphor
- D) claim that a term has changed too often over the years to have any real meaning
- E) account for the apparent disappearance of a certain personality type

A) define a term that has fallen into disuse

Is the passage mainly concerned with defining what a neurotic is? Isn't the passage more concerned with trying to figure out what happened to the neurotic? True, in answering this second question the author mentions how the definition of neurotic may have changed. He does not spend the entire passage trying to define it. So while tempting, this answer choice is wrong.

(B) describe the irrevocable disappearance of a trait

Watch out for words like 'irrevocable.' Do not just pretend that the word is not there, focusing instead on the other words. While the passage does focus on the disappearance of the neurotic, this disappearance is not 'irrevocable', meaning impossible to reverse. In fact, the author says that neurotics may be all around us.

(C) expand on a well-known metaphor

No metaphors are being used in this passage. Neurotic is an actual tag used to describe certain people. (D) claim that a term has changed too often over the years to have any real meaning

Sure the word neurosis has changed over the years, "Neuroticism" is one of the "dimensions" of the so-called five-factor model of personality. However, nowhere in the passage does it mention that the term has changed too often over the years to have any real meaning.

(E) account for the apparent disappearance of a certain personality type

Has the neurotic truly disappeared? Well, the passage tries to account for this apparent disappearance. It should also be clear from the passage that the word 'neurotic' refers to a certain type of person, nervous company for nervous days

How different can they be?

Old specifications for reading

- Unit 1 had 3 ten mark questions based on one fictional reading passage. Pupils were expected to `track` through the sections, making a range of valid points, selecting apt quotations and evaluating the words or phrases chosen.
- Unit 2 had 3 ten mark questions based on 2 non fiction resources. Apart from the first question on the Foundation tier, pupils were expected to `track` through the sections, making a range of valid points selecting apt quotations and explain or explore the language choices.

New specifications for reading

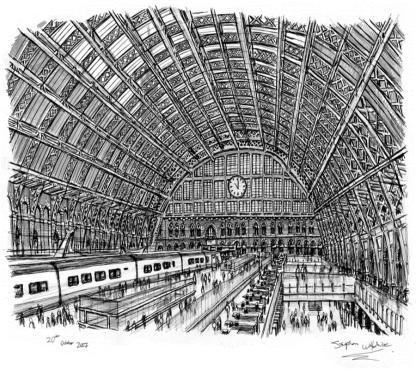
- A mix of AWRT / PISA style questions where precision and accuracy is paramount alongside questions which demand extended responses.
- Shorter extracts / texts and more variety – more to read and get the `gist` of in a shorter space of time.
- Greater variety in the purpose of texts being used but all linked with a common theme – this can be confusing.
- Non continuous as well as continuous texts.

For the visual learners...

Old specs



New specs



Let's play a game:

AWRT?

Old Specs?

New Specs?

TEXT A

The information refers to `demographic`. Select one definition from the list below that best defines a `demographic`?

- a) A graph showing changes
- b) Time spent away from home
- c) A way of grouping people
- d) A period spent travelling

AWRT / New Specifications / Old specifications

Read lines 53 - 77

What happens in these lines? What do you think and feel about Jackson in these lines? (10)

AWRT / New Specs / Old Specs

Look at the section called From museum to mountain

a) What does the word *hoard* refer to?

Tick one..

The bungalows

The lorries

The visitors

The paintings

b) Find and copy the word which shows that the effort of moving all the pictures was worthwhile.

AWRT / New Specs / Old Specs

TEXT B

A5. What does Bill Bryson say about American attitudes to disasters?
Refer to the language he uses in your response

AWRT / New Specs / Old Specs

But in reality.....

The greatest change might not be what is being taught, but how skills are taught.

Are English Departments ready?

Old school

- love the literature
- love the `flair for language`, style and expression
- love empathy and feelingsvery touchy feely?

The updated version?

- Precision and accuracy
- Concise
- Value listening over speaking
- Value reasoning over emotion
- Value content over style
- Value reliable information over exaggeration

Were we ready? We thought we were.....

Why we thought we were ready

- We had added a few starter AWRT style questions
- We were beginning to look for more non fiction material to work alongside the existing fiction texts we had
- We had begun to think about adding in more `non continuous texts`

Why we weren't ready

- We were adding things without thinking about how they should be taught.
- Children didn't have the strategies to cope with the more demanding non fiction material and follow complex arguments.
- We couldn't `see` why they were getting questions wrong.

How we are getting ready....

Explicitly teaching the thinking processes - metacognition

•noun, Psychology 1.higher-order thinking that enables understanding, analysis, and control of one's cognitive processes, especially when engaged in learning.

It's a bit like `showing the working out` in numeracy. Unless you `see` their workings out you don't know where they have gone wrong, their thought processes and how to intervene to support them.

What the Welsh Assembly Government say...

"Developing thinking can be defined as developing patterns of ideas that help learners acquire deeper understanding and enable them to explore and make sense of their world. It refers to processes of thinking that we in Wales have defined as plan, develop and reflect. These processes enable learners to think creatively and critically to plan their work, carry out tasks, analyse and evaluate their findings, and to reflect on their learning, making links within and outside school. Although we are born with a capability to think there is ample evidence that we can learn to think more effectively. Developing thinking pedagogy has considerable overlap with the principles of assessment for learning."

What the Welsh Assembly Government say...

- a greater focus on **how to learn, i.e. the** *process of learning, than on* what to learn, i.e. the subject knowledge and skills
- learners are frequently required to verbalise and to articulate their thinking/learning so that the processes are made more *explicit and visible in the classroom*
- learners and teachers have a common language of learning
- a focus on group collaboration and co-operation, with teachers facilitating learning
- learners support each others' efforts to learn and jointly construct their learning
- learners take responsibility for their own learning and make informed decisions
- learners reflect, monitor and self-evaluate their own progress
- learners are encouraged to transfer their learning across contexts and to make connections
- the environment is sensitive, constructive and reflective so that learners feel safe to make mistakes.

What the Welsh Assembly Government say...

- Intelligence is modifiable therefore every learner can improve.
- Deep understanding is more important than superficial learning
- Learners need explicit strategies for how to learn
- Challenge and interest can lead to motivation.
- All participation is valued.
- Collaboration (learning with others) will allow learners to take greater educational risks and take their learning forward.
- Metacognition (thinking about thinking) is at the heart of the learning and teaching process.
- Skills and knowledge must be transferred both within the school and in the wider world.

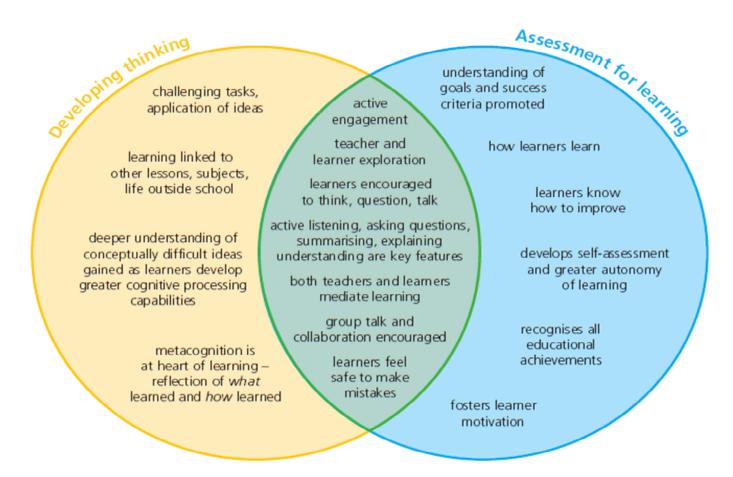
A central crucial process in developing skilful thinking is **metacognition**

(thinking about thinking). Learners must reflect on their learning and intentionally apply the results of reflection to further their learning. This reflection needs to be across several areas such as:

- making sense of the task
- knowledge of strategies and methods, how and when to use them
- knowledge and understanding of thinking processes
- monitoring and evaluating learning from the success (or otherwise) of chosen strategies or methods.
- making connections across contexts.

Teaching metacognition, thinking about thinking, is arguably the most difficult aspect of developing thinking.

A comparison of the features of developing thinking with assessment for learning



Taken from Why develop thinking and assessment for learning in the dassroom? (Welsh Assembly Government, 2007)

So... yes, we have developed resources and some of the resources we have developed I have included in the pack. But, it is the teaching of the resources that is the key.

We have:

- modelled the reading process with classes;
- taught pupils the different reading skills and processes and named them –
 skimming, scanning = processes
 interrogating and asking questions = process of reading
 Locating, comprehension, summary, sequencing, synthesis, analysis, inference, deduction, evaluation
- supported them in developing verbal reasoning skills elimination / sentence structure / capital letters / punctuation, so that they don't panic and give up.
- constantly used assessment for learning skills mini whiteboards to check every pupils' understanding and engagement, targeted questions, unpicking `wrong answers` and discovering their thinking behind the responses, making the reasoning behind their thinking as important as the answer.

Why we think the programme is effective.

- Enables pupils to access very complex reading material and develop resilience because we are giving them the strategies for how to unpick difficult language choices / content. They are really thinking!
- The *direct teaching* of the skills is being modelled by the teacher.
- Pupils are often working collaboratively and learn from each other when discussing which strategies worked best.

The way we have adapted the programme in school and with our primary feeder schools

Two of my colleagues visit our primary feeder schools on a rota system, specifically with non fiction texts and non continuous texts with content that is age appropriate. We have built up a bank of AWRT style questions and resources. More importantly, our two colleagues pass on what they have learnt about the teaching of reading strategies to our primary colleagues by modelling the process and team teaching.

Performance management – what should you be observing in your English team?

What you should see.....

- Confident use of the reading terminology by teachers and pupils
- Direct teaching of reading strategies through modelling
- Reading responses to AWRT style questions being discussed and verbal reasoning being `unpicked`
- Direct teaching of verbal reasoning through the modelling from the teacher or other pupils in their responses

What you should see.....

- A variety of tasks designed to support pupils' understanding of complex reading material – 66 words or less, visualisation, sequencing, pre and post reading strategies for true or false, information retrieval charts, word explosions
- AWRT style questions embedded throughout their schemes of work
- A wide variety of reading material, including non continuous texts
- A `raising of the bar` in terms of reading age material

Performance management – what should you be observing in your English team?

Just be careful....

- AWRT style questions used as starters or plenaries with no discussion time devoted to them
- Still focused on a lot of fiction texts and character work or empathy
- Teachers reading the material for them

Just be careful....

- No direct teaching of the reading strategies – just tasks
- Vague terms being used, for example: read over the passage and put it in your own words
- Accepting imprecise
 answers from pupils such as
 saying it is a `nice` place

It's a lot to do!

- English departments do need time to develop resources, share ideas and teaching strategies by observing one another and learning from each other. This is crucial.
- English Departments can also support other departments within the school to support the metacognition of reading skills and primary feeder schools.
- Yes, it is expensive.
- Yes, it takes time.
- But.... If something is worth doing, it is worth doing well.
- Our pupils deserve it.